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ABSTRACT

A study investigated the postsecondary intentions and the actual outcomes of secondary transition among 321 students from five schools in New Zealand. Phase 1 identified students who did not intend to return to secondary school. The next year (2000), they became the target population for Phase 2, which examined the students' actual continuation on to tertiary study, tertiary qualifications, tertiary institution attended, employment patterns, intended career or job title, and sources of information they used or desired in the transition process. By 2000, approximately two-thirds had a firmer idea of their career direction. The most common pattern of intentions and actual activities was for students to leave school after year 13 with an A or B Bursary and study for a degree at a university while working part time or casually. European students were more likely than Maori and Pacific students to be more sure of their career plans, more likely to be studying at universities and polytechnics, and more likely to be making a smoother postsecondary transition. Students from low-decile schools were less likely than those from high-decile schools to participate in tertiary study. They also tended to have more vocational focus. The "most useful" sources of information were "employment-, school-, or tertiary-based." Researchers concluded that New Zealand students could benefit from individual career planning counseling. (The survey and survey results in tables and graphs are appended. Contains 33 references.) (KC)

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Beyond School

Final year school students' experiences of the transition to tertiary study or employment

Sally Boyd Anna Chalmers Eugene Kumekawa

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BEYOND SCHOOL

FINAL YEAR SCHOOL STUDENTS' EXPERIENCES OF THE TRANSITION TO TERTIARY STUDY OR EMPLOYMENT

Sally Boyd, Anna Chalmers,
and Eugene Kumekawa

New Zealand Council for Educational Research
Te Rūnanga o Aotearoa mō te Rangahau i te Mātauranga
Wellington
2001

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EXECUTIVE SUMMARY

This report presents the findings from a two-phase study of 321 students from five secondary schools (covering a range of school deciles), investigating the similarities and differences between the young people's post-secondary intentions and the actual outcomes of secondary transition. The purposes of Phase 1 of this study, undertaken in 1999, were to identify a group of students who did not intend to return to secondary school, and examine their tertiary study and career intentions.

These students became the target population for Phase 2 of the study, undertaken in 2000. Phase 2 examined the students' actual activities in terms of:

- continuation on to tertiary study
- tertiary qualifications
- tertiary institution attended
- employment patterns
- intended career or job title
- sources of information used or desired in the transition process.

A number of independent variables were examined in this study: student gender, ethnicity, decile of secondary school attended, and age and year level in last year of schooling. Where appropriate, a chi-square test was used to examine the significance of relationships. Of these variables, student ethnicity, school decile, age, and year level in last year of schooling were found to be significant in the findings for many of the questions from both phases of this study. On the whole, there were very few significant variations by student gender.

The most common pattern of both intentions and actual activities was to leave school after year 13 with an A or B Bursary to study for a degree at a university, while working part-time or casually. This study was undertaken as a stepping stone towards a professional or technical career.

In 1999, almost half of the students were unsure of their career aspirations. By 2000, approximately two-thirds had a firmer idea of where they were headed career-wise. Although most students had continued on with at least some of the plans they had made in 1999, the majority had also developed or changed their plans in some way.

In 1999, more students intended to study for degree programmes at universities than actually did so in 2000. Most of those who did not study for degrees as intended were completing diplomas, other programmes, or Youth Training and Training Opportunities Programmes (TOPs) at polytechnics or other tertiary institutions.

"At risk" students

This study identified several groups of students who were "at risk" of "leaving school unprepared for the transition to the workplace or further education/training", as defined in

the *National Administration Guidelines* (Ministry of Education, 1999, p.25). Students in these groups potentially require more information and assistance with transition decisions. The groups identified in this study as most "at risk" were students who left school after year 11 or 12 (or under 17 years of age), or after year 14; Maori and Pacific students; and students from the lower decile schools.

Students from the lower decile schools were less likely to participate in tertiary study in general, and more likely to plan to attend, and actually attend, polytechnics, private training establishments, or study for a diploma or a similar qualification, rather than study for a degree at a university.

Maori students in this study tended to leave school earlier than their European or Asian counterparts. They were more likely to be unsure of their intended destinations, and less likely to participate in tertiary study. Maori students also showed less satisfaction with the information and preparation they were given at school. **Pacific students** also tended to participate less in tertiary study than their European or Asian counterparts.

Younger and older students – those who were aged 15, 16, 19, and older when they left school (or who left school after year 11, 12, or 14) – were different from the others. Proportionately more of these students did not intend to progress to tertiary education, or did not know what they would be doing next year. Of the future students, fewer attended a university. In contrast, a higher proportion of those aged 17 or 18 (and those who left school after year 13) studied for a degree at a university.

There were **no major significant differences between females and males** regarding transition patterns, except for the qualification area they were pursuing. Proportionately more females were studying arts and social sciences, tourism and recreation, health and social services, design and performing arts, education, and business and finance. Proportionately more males were studying science and the environment, computing and mathematics, engineering and architecture, and construction.

Information, advice, and preparation

The information source **most used** – that is, used by the largest proportion of students – to assist their transition decision-making was **"Family members and relatives"**.

However, at the follow-up point, when the sources were ranked as a percentage of those who had used them, those that rated as the **most useful** in assisting transitions decisions were mostly **"school-, tertiary-, or employment-based"**; for example, the careers information service at their secondary school or contact with people in industries they intended to work in. "Family members and relatives" was the only "personal-based" information source ranked in the top 10 "most useful" sources at the time of the follow-up study.

For students who had attended the lower decile schools, the most frequently used information source was "The careers information and advice service at your school". For students who had attended the two higher decile schools, the most frequently used information source was "Family members and relatives".

At the follow-up point, the majority of students felt they had had sufficient information, advice, and preparation to help them decide what to do on leaving school. The main gap identified by students in the provision of information, advice, or

preparation was "career planning"; for example, they would have liked the concept of career planning to be introduced at a younger age.

Adequate information, advice, and preparation was directly related to the ability of students in this study to make good decisions. Students who did not feel that they had had enough information, advice, or preparation were more likely to say that they would have made different decisions if they were able to have their last year of schooling again. Those who had firm plans before they left school were more likely to continue on to tertiary study.

INTRODUCTION

This report presents the findings from a two-phase study on the transition from school to further study or work. The study focused on a sample of 321 students, drawn from five schools, in their last year of schooling and their first post-school year. Building on other New Zealand studies in this area, such as Parr and Parr (1995) and Wilson and Young (1998), it examined students' intentions prior to leaving secondary school, and their actual destinations one year later. It also considered whether demographic factors, including the students' gender, ethnicity, age, last year of schooling, and socio-economic status (SES; indicated by the decile rankings[1] of the schools the students attended) were significantly associated with student decision-making and intended destinations.

Background

In 1995 a review was undertaken of career information and guidance in New Zealand schools. As a result of this review, an additional national administration guideline within the national education guidelines clarified the responsibility of schools to provide appropriate career information and guidance for their students. Other results of this review were extra funding to secondary schools for providing career information and guidance to students, and the publication of a document of good practice in career information and guidance (Ministry of Education, 1997b). The implementation of this policy was reviewed the following year (Wilson & Young, 1998). Findings from this review are reported below. A useful description of current New Zealand policy models and administrative arrangements for careers information and guidance can be found in the country paper prepared for a recent international symposium on career development and public policy (Oakes, von Dadelszen, & Barker, 2001).

In 1998 the Education Review Office (ERO) produced a report on *The Senior Secondary Student*. This report drew on information included in ERO institutional reports on 135 schools with secondary school students. It found that half the schools provided a good quality career information programme for their senior students. In 1999 ERO analysed 100 ERO reports on schools with secondary students to assess whether there had been changes since 1998 in the quality of schools' provision or in the ways in which they helped students plan and prepare for future careers. The 1999 ERO report found the quality of provision of career information and guidance in the 100 schools studied to be good in over half the schools, and satisfactory in a further quarter. The report concluded that approximately four out of five schools were providing acceptable to good career information and support. Indicators of effective provision are provided at the end of the report.

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[1] Decile ranking is a socio-economic indicator of New Zealand schools developed from six dimensions pertaining to students, namely equivalent household income, parents' occupation, household crowding, parents' educational qualifications, income support payments received by parents, and percentage of students who are of Maori or Pacific ethnicity (Ministry of Education, 1997a).

Related research

A number of overseas and New Zealand studies have found strong relationships between family SES and post-secondary destinations, performance of school-leaving students, or school retention (Haveman & Wolfe, 1995; Lauder & Hughes, 1990; Nash, 1993; Fergusson & Woodward, 2000; Parr & Parr, 1995; Long, Carpenter, & Hayden, 1999).

In their review of recent overseas study findings on the social and family determinants of children's attainment, Haveman and Wolfe (1995) reported that, with the exception of one study, the family income variable was positively associated with the educational attainment of the child, and this variable was statistically significant in more than half of all cases where a positive relationship was estimated. In examining the determinants of labour market outcomes, Haveman and Wolfe (1995) reported that the most consistent finding of this body of research is the positive and significant effect of parental income while children are growing up on their later labour market performance.

In a 1982 study of more than 2,700 Christchurch school leavers, Lauder and Hughes (1990) found clear differences in the success and failure of students according to their socio-economic background and in their first destination after leaving school, even when ability was taken into account. For example, of those with high measured scholastic ability, over 90 percent of students from professional and managerial backgrounds gained university entrance, whereas fewer than 70 percent of those from blue-collar backgrounds did so. Similarly, of those who gained university entrance, 70 percent of the students from professional and managerial backgrounds went to university, while only 40 percent of those from blue-collar families did so.

Nash (1993) re-analysed the 1982 data from the Christchurch School Leavers study (Lauder & Hughes, 1990) to illustrate the extent of social disparity in educational attainment. He reported that the data showed very high levels of class inequality in access to education. He suggested that if able pupils from other classes were able to enjoy the same level of attainment as professional-class pupils, their seventh form results would double. However, Nash cautioned that the proportion of pupils entering the seventh form doubled between 1982 and 1993, and suggested that it would be very surprising if a contemporary survey were to find the same pattern.

In a 21-year longitudinal study involving a cohort of 1,011 young New Zealanders, Fergusson and Woodward (2000) reported on the relationship between young people's SES at birth, and their subsequent entry into university education at or before the age of 21 years. The authors found that able children from professional or managerial family backgrounds were about one and a half times more likely to go to university than children of similar ability from low SES families. This difference in university participation was explained by a tendency for young people from unskilled/semiskilled socio-economic backgrounds to gain fewer school leaving qualifications than their higher SES peers of similar cognitive and educational ability.

Parr and Parr (1995) collected data from 1763 seventh form students in 1993 and 1994 to describe the nature and extent of the students' tertiary aspirations, and then to ascertain the outcomes. The students came from 37 schools in the Auckland region. An analysis of student intentions by parents' occupational categories found that 79 percent of those whose fathers had an upper professional occupation intended to apply for

university, 25 percent for polytechnic, and 8 percent for a college of education. Among those whose mothers had an upper professional occupation, 76 percent intended to apply for university, 22 percent for polytechnic, and 10 percent for a college of education.

Long, Carpenter, and Hayden (1999) investigated the patterns and processes of educational participation for four national cohorts of young Australians born in 1961, 1965, 1970, and 1975 respectively. The authors found that across all four cohorts, young people from backgrounds of higher parental occupational status, higher parental educational attainment, and greater family wealth were more likely to have completed year 12 and to have entered higher education from year 12. Overall, the students who were more likely to have completed year 12 were female, came from higher socio-economic backgrounds, were from a non-English speaking background, lived in urban areas, had attended an independent school, and had higher levels of early school achievement.

New Zealand and overseas studies have investigated subject choices and intended careers of intending tertiary students. In 1988 a national pilot survey (Rivers, Lynch, & Irving, 1989), involving nearly 80,000 students from Forms 5, 6, and 7, was conducted in 328 New Zealand secondary schools. Known as Project FAST (Future Aspirations, Subjects, and Training), the project aimed to develop an information base showing the students' work aspirations, subject choices, work experiences, and intended paths to education, training and work, and to make this available in the same year that the data were gathered. The Project FAST students intending to study full-time at university in 1989 were asked to select the subjects that they intended to study. The authors reported that 33 percent of males and 25 percent of females expected to take a commerce course. Medical science was the next most popular course (slightly more popular with females than males) followed by the humanities, social sciences, and law for females and engineering, law, and mathematics/computing for males. The gender difference for females studying full-time at university was most marked for engineering (where females made up four percent of those planning to study this area). Architecture, mathematics, computing, and commerce also remained dominated by males, but the increasing numbers of females studying law, medicine, and agriculture was suggested as evidence of some moves by women into areas which were earlier the preserve of males.

Rivers, Lynch, and Irving (1989) found that gender preferences were strongly evident in the intended subject course choice of students planning to study at polytechnics in 1989. For females, secretarial studies and related subjects (such as business studies and shorthand) were the main choices, followed by nursing. Males tended to choose from a broader range. Male-dominated polytechnic choices included architectural draughting, electronics, engineering, automotive mechanics, and other "male" trades. While there were some young women choosing some of these subjects, their numbers were small. There was less gender imbalance in some other courses. For example, business computing, computer studies, professional cooking, and advertising all had at least a reasonable proportion of female-to-male students intending to take these courses of study. The five most popular intended occupations of final school year female students were primary school teacher, followed by lawyer, accountant, nurse, and doctor. For male students they were accountant, followed by professional engineer, armed forces officer,

lawyer, and police officer. It should be noted, however, that these data represent a very small proportion of the students who responded to this question.

In a review of information held by the Ministry of Education, Pratt (1999) found that stereotypical gender differences in subject selection continued to be evident over a number of years in the relative rankings of the 10 most popular subjects for School Certificate (1986-1997), Sixth Form Certificate (1988-1997), and Bursary examinations (1990-1997).

Bloor and Brook (1993) examined the adaptive career behaviour of 157 undergraduate students attending Massey University who had left school within the previous 14 months. They found that less than half the sample were able to specify a preferred occupation, and that the students tended to fall into three groups. The "career decided" group had a clearer sense of identity, rated more highly the importance of looking ahead and making tentative plans, and were more likely to possess information about the world of work and to be capable of making their own career decision, than the "career undecided" group or the "career avoiders" group. Those who had a commitment to an occupational goal possessed a higher level of career development, reported greater satisfaction with life, and exhibited higher self-esteem than those with no such clarity of direction.

Maani (2000) used 1977-1995 data from the Christchurch Health and Development longitudinal study to examine the determinants of school leaving and labour supply of young adults at ages 16 and 18. She found that intentions at age 16 to attend university or polytechnic were closely associated with later attendance at the respective institution at age 18.

Using data collected between 1990 and 1997 as part of the Australian Youth Survey, a national longitudinal survey of young people, Lam and Ball (1999) examined the patterns of course enrolments in year 12 and the consequences of students' course enrolments on their education, training and work experiences to age 19. In particular, they looked at what happens to young people as they move from school to post-school education and training, and to work. Lam and Ball (1999) found that about one in five boys and one in 12 girls enrolled in mathematics and the physical sciences; over 25 percent of girls and 15 percent of boys enrolled in a combination of mathematics, sciences, and humanities subjects; and over 15 percent of students from low SES backgrounds enrolled in courses combining vocational education and technology subjects, compared with about 8 percent of high SES students.

Young people from higher SES backgrounds, those from private schools, those who had been high achievers earlier in school, and students from non-English speaking backgrounds tended more often to study the courses that are avenues to higher education and the professions. Disadvantaged students tended to participate in courses that led to vocational education and training or, more often, to entry to the labour market without any further formal education or training. The findings suggest an independent influence of student-course taking on post-school outcomes. After controlling for background, achievement, and school differences, large variations remained in the likelihood of participating in further education and training based on subject choices in year 12.

A number of overseas and New Zealand studies have investigated the various influences on student career and study decision-making, including the role of student self-

understanding, goal setting, the wider concept of student vocational maturity, family expectations, and the use of formal and informal information sources (Parr & Parr, 1995; Conti, 2000; Khan & Alvi, 1983; Lauder, Hughes, Dupuis, & McGlinn, 1992; Ainley & Sheret, 1993; Rivers, Lynch, & Irving, 1989; Paa & McWhirter, 2000; Hodkinson, 1996; Wilson & Young, 1998; Julien, 1999).

Parr and Parr (1995) reported on New Zealand seventh formers' self-reporting of their reasons for their subject choices in 1995. Asked about the reasons rated as important or very important in making their choices, just under 90 percent of the students gave "I am best at these subjects"; a little over 80 percent gave "these subjects are required for the tertiary course I want to take next year"; and a little under a quarter gave "my family wants me to take them". Asked about the reasons for undertaking tertiary study, 86 percent of the students gave "those who complete tertiary study are better off in the long run" as a very important or important reason; 84 percent gave "the career I want requires tertiary study" and "I feel I can achieve tertiary study"; and 73 percent gave "my family encouraged me".

Conti (2000) investigated whether choosing autonomous goals for pursuing a college (that is, university) education and reflecting on those goals promotes intrinsic motivation toward course work, higher grades, and improved adjustment to college over time. She investigated whether students' goals for attending a small liberal arts residential college in the United States influenced their experiences during their first semester. The male and female students were aged between 17 and 20 and numbered 159 in the first follow-up and 86 in the second. (In tests on the two groups, no significant differences for all the continuous variables were found.) Conti found that reflection on one's goals for college, and the autonomy of those goals, were both related to success during the first semester. Specifically, students who reflected on their goals for college reported higher levels of intrinsic and extrinsic motivation. Conti concluded that students who feel autonomous in their goal pursuit and are more intrinsically motivated and less extrinsically motivated perform better academically, and show improvement in social and emotional adjustment over the first few months of college.

Khan and Alvi (1983) investigated the educational, social, and psychological correlates of vocational maturity in an Ontario high school involving a sample of 272 students. The correlates of vocational maturity included social, educational, and psychological variables such as SES; early childhood experiences; educational and vocational aspirations, needs and interests; self-concept; locus of control; and cognitive styles. The authors found that individuals who had higher educational and vocational aspirations (to a degree shared by their parents) had more positive estimates of their own ability and academic attainment; enjoyed higher self-esteem; exercised more internal locus of control; cherished more intrinsic work values; and tended to exhibit greater career and vocational maturity. Khan and Alvi (1983) suggested that an important implication of these observations for practice is that any programme designed to facilitate career development must be conceived as part of a total educational experience aimed at developing a positive self-concept, higher levels of educational and vocational aspirations, an understanding of one's own strengths and weaknesses, skills in decision-making and problem-solving, and appropriate work values.

Lauder, Hughes, Dupuis, and McGlinn (1992) examined the educational decisions made by similar ability students from a range of social backgrounds for a sub-sample of 129 young people from the 1982 Christchurch School Leavers Study (referred to above). This analysis suggested that for children from professional or managerial backgrounds, university entry was typically seen as an expected part of their life course. This group tended to assume automatically that going to university was both a natural and beneficial move, with this view constituting the fundamental wisdom of this group. In contrast, lower SES families tended to take an instrumental approach to schooling, placing a greater emphasis on the role of education as providing entry into a good job or specific vocational course, while viewing a university education after leaving school as a more risky career path than entering the workforce or vocational training.

Ainley and Sheret (1993) examined transitions in New South Wales high schools. They found that parental expectations of continued education was the component of student background that most strongly distinguished year 10 leavers from those who continued to year 11. They reported, interestingly, that SES was not strongly associated with the educational expectations of parents for their children.

Rivers, Lynch, and Irving (1989) asked final year students about whom they had discussed their futures with. Mothers, friends, fathers, school careers advisers, teachers, and other relatives were the most common responses. The authors reported that a greater proportion of females than males discussed their futures with their mothers, but mothers were still the most used source of discussion for both females and males. For males, after mothers, fathers were the second most used source, followed by friends and school careers advisors. For females, fathers were the fourth most used source, coming after mothers, friends and school careers advisors.

Females used most sources (school careers advisers, Department of Labour (the least used source), teachers, friends, other relatives, mother), more than males, except for fathers and other people, which males used more. Males were more likely than females to say they used "no-one", and also to have missing data.

Paa and McWhirter (2000) examined perceptions of influences on the career expectations of 464 first- and second-year, predominantly European American, high school students, in order to gain insight into the students' perspectives of the multiple interacting influences on their career development. They found that in the category "environmental influences", the strongest perceived influences for girls were, in order of descending importance, mother, father, and female friends. Male teachers and counsellors were the weakest perceived influences in this group. For the boys, the three strongest influences were father, mother, and male friends, whereas counsellors, female teachers, and female friends were the weakest influences. There were significant gender differences in the mean ranking for mother, male teachers, male friends, and female friends. In each case, the results suggested that same-sex role models were perceived to be more influential on current career expectations than role models of the opposite sex.

Hodkinson (1996) asked 115 trainees in a United Kingdom vocational training credits programme to describe why and how they had decided on a particular course of action for the next year and beyond. Many said they were influenced by close relatives or neighbours who worked in the same fields. This influence included listening to the advice and long-term work experiences of these people. Students' own work experience also

strongly influenced many students, some positively and some negatively. The students had largely rational reasons for making their choices and changing their minds. They often chose jobs they knew a great deal about, and the source of information was often an insider whom they knew personally and felt they could trust. Hodkinson (1996) reported that the decisions were based on partial information that was localised and grounded in the familiar and the known. The students' decision-making was context-related, and could not be separated from their family background, culture, and life history. Their decisions were also opportunistic, being based on fortuitous contacts and experiences.

The influence of families on students' tertiary education decisions has been the subject of several recent articles in the *Times Higher Educational Supplement*, by McCord (2000), Furedi (2001), and Apter (2001). McCord (2000) stated that recent research shows parental influence on prospective undergraduates is greater than any other influence, including school principals. She referred to market research by the University of Manchester into the role of parents, which shows how their importance has increased dramatically in recent years. They are now more influential than teachers when it comes to a sixth-former's choice of tertiary institution and course. Parental open days are held weekly during term time, and parents are given the opportunity to discuss issues that concern them, as well as being given a guided tour. The introduction of tuition fees is thought to be a major reason for parents' vested interest. There is, however, a concern that many parents have misconceptions about higher education, and often base their decisions concerning their children on out-of-date information. Furedi (2001) wrote of the infantilisation of campus life, with over-involvement by parents, while Apter (2001) described the young adults as "thresholders" who benefit from parents' practical help with the proliferation of choices in education and careers.

Parr and Parr (1995) asked New Zealand students to indicate the usefulness of sources of information for their plans for the following year, using a list provided. Just under 80 percent of students (slightly more females than males) found the school careers adviser to be very useful or useful; followed by 70 percent (again more females than males) who found family and friends to be very useful or useful. Around two-thirds of students (similar proportions of females and males) found visits by institution personnel, written material from the institutions, and open days at institutions to be very useful or useful. Just under half the students gave this rating for Careers Expos, while a quarter gave this rating for advertisements in newspapers. Just under 20 percent rated the New Zealand career service as useful or very useful. (Another 57 percent selected "not applicable" for this option. Parr and Parr (1995) pointed out that although the career service was given as an option, in fact it does not work directly with students, but rather with advisers).

Wilson and Young (1998) surveyed 130 students from 12 schools as part of their follow-up study on the implementation of the career information and guidance policy in New Zealand schools. When asked about influences on their career and transition decisions, the students were most likely to mention family members and whanau, followed by Careers Expos/open days/liaison officers and personal interest. Although parents seemed to have a substantial input into their children's career decisions, Wilson and Young (1998) noted that only a small number of schools directly involve parents as

one of the main career resources through option evenings, work experience placements or the Parents as Career Educators (PACE) programmes run by Career Services Rapuara.

The authors asked the students about their awareness of career information resources at their school, whether they had used these resources, and how useful they had found them. At least half the students had used the career library/resource room, Quest database, Careers Expo, presentations by tertiary institutions, personal interviews with career counsellors, and work experience programmes respectively. The five school resources ranked as most useful by the students were Careers Expos, open days at tertiary institutions, taster days or STAR courses, personal interviews with career counsellors, and work experience programmes. Wilson and Young (1998) concluded that on the whole, young people prefer personal contact and "hands-on" sources of information. About 80 percent of the students felt the school had provided them with the information they needed to plan their career.

By contrast, in a study of some 400 Canadian students, Julien (1999) found that nearly a quarter of the students felt they lacked the information to actively seek helpful career information, and a little over a third did not know what courses they needed in order to achieve their career goals. Julien (1999) cited a summary of four barriers to information access: not knowing what information is needed to make a decision; not knowing where to find the information that one realises is needed; lack of awareness of information sources; and the fact that the information needed may not exist.

METHODOLOGY

Phase 1, 1999

In late 1999, 477 students who intended leaving school at the end of 1999 completed a questionnaire about their study and work plans for 2000. The purpose of Phase 1 was to gain insight into the intended destinations of the students, the information sources they used to make their decisions, and any gaps they perceived in the provision of transition information. The main research question for Phase 1 was:

- What were the decision-making and destination patterns in the school-leaving intentions of the secondary school students studied?

Phase 2, 2000

In late 2000, the original respondents were contacted again by telephone to ascertain their actual destinations; their satisfaction, in hindsight, with the information they had available; their plans for the future; and the motivations and perceptions underlying their career decision-making. The key research questions for Phase 2 were:

- Did students leave school as intended at the end of 1999?
- What qualifications had students gained by the time they left school? What qualifications were gained in 1999 and what were gained in earlier years?
- In 2000, did students' employment or educational activities match their aspirations and plans made in 1999? If not, why not?
- What employment or educational activities did students who had been unsure of their aspirations when they were questioned in 1999 do in 2000?
- What were the motivations underlying students' career-decision making and their study and career choices?
- With hindsight, did students believe they had sufficient "good" information to make an informed decision on their "life after school"? If not, where were the information gaps?
- At this stage, would students have made the same decision if they were leaving school at the end of 2000? What were the reasons for their response to this question?
- What were students' plans for the future?

The sample

Schools

Five secondary schools from three main urban areas in the North and South Islands participated in this study. Four of the schools were co-educational and one was a single-sex girls' school. In terms of decile rankings, one school was decile 2, one was decile 3, one was decile 4, and the other two schools were decile 9. That is, two were low decile schools, one was a medium decile school, and two were high decile schools (as defined

by the Ministry of Education, 1997a). In 1999, the two decile 9 schools had at least three-quarters European students; fewer than 10 percent of their students were Maori, Pacific, and Asian respectively. The other three schools had much higher proportions of Maori, Pacific, and Asian students. Two of these schools had approximately one-quarter Maori students, two had over one-third Pacific students, and two had over one-eighth Asian students.

Phase 1 students

The intention of phase 1 was to identify intending school leavers. A questionnaire was administered on a designated day to all year 11, 12, and 13 students attending school on that day (some 1912 students, for whom demographic information is contained in appendix A). These students included a small number of mainstreamed students with special needs. The questionnaire was in two parts. The majority of students intended to return to school the following year. These students completed the first section of the questionnaire only. Another 477 students (25 percent of the total) did not intend to return to school, and 10 percent were unsure if they would return or not). The 477 students who did not intend to return completed the full questionnaire and became the potential sample for Phase 2.

Phase 2 students

Of the 477 original respondents, 29 (6%) did not supply a telephone number or an address and therefore were unable to be contacted for a follow-up interview. The potential sample for Phase 2 was therefore 448 respondents with whom contact could be made. The final sample for Phase 2 was 347 people (77%). The 101 non-respondents consisted of 30 (7%) for whom the telephone number given was no longer operative, 63 (14%) who were not at the number listed or were unable to be contacted, and eight (2%) who declined to take part in the interview.

Of the 347 young people interviewed, 26 (7%) had subsequently decided to return to school in 2000 and therefore no longer met the criteria for the full interview. The remaining 321 young people who had left school were interviewed about their work and study activities in 2000. These 321 young people therefore comprise the final sample for this report.

The Phase 2 sample of 321 respondents was not significantly different from the Phase 1 sample of 477 on any of the main variables, that is, student gender, ethnicity, school decile, age at leaving school, and last year of schooling.

Interpretation

This report offers a range of information about students from five secondary schools with four different decile rankings. The trends and viewpoints reported here are likely to be indicators of similar trends in the wider school-leaving population.

Although the sample for this study over-represented female students, due to the inclusion of a girls' school in the sample, very little variation by gender was found. Therefore it is likely that this over-sampling of girls has had very little, if any, impact on the results reported here.

Deciles 2, 3, and 4 were each represented by only one school, and decile 9 by two schools. Other deciles were not represented. Individual programmes and policies at each school will affect the information presented by decile. However, although these data show a "school effect", trends by decile are still shown.

The method

Phase 1: Questionnaire

Toward the end of 1999, 1912 students from the five schools in the study completed a structured self-administered written questionnaire (see Appendix B). Prior to this process, an introductory letter and consent form were sent to the students' caregivers (see Appendix C). The questionnaire was handed out to students attending school on the designated day by teachers, along with an introductory letter and consent form (see Appendix D). The completed questionnaires were returned to NZCER.

Phase 2: Interview

Attempts were made to contact the 448 students who had intended not to return to school in 2000 and for whom contact details had been provided. Contact was made by telephone to ascertain that the students had in fact left school, and to obtain their consent to participate in a telephone interview. It was expected that this method would result in a higher response rate and better quality information than a postal questionnaire, for several reasons. First, current contact information for the students who were no longer living at the original contact address could be obtained. Secondly, it was considered that students would be more likely to be willing to talk for 15 minutes or so on the telephone than they would be to complete a postal questionnaire. Lastly, it enabled respondents to be probed for information in more detail (Reich & Earls, 1990).

When the respondents were initially contacted, they were read background information about the aim of the study and were informed of their right not to participate. Respondents were asked to give verbal consent if they agreed to participate. (See Appendices E and F for the introductory material and the interview schedule). An appreciation token of a $10 movie, book, or CD voucher was offered to respondents on completion of the interview to acknowledge their participation.

Interview design and implementation

A structured telephone interview schedule was developed from the research questions for Phase 2 and was reviewed by the research team and advisory committee members. It was then pre-tested on five recent school leavers who were not part of the initial study. From these reviews and the pre-test, a number of changes were made to the schedule.

The schedule was piloted with 20 respondents from the range of schools and the range of ethnic backgrounds in the sample. From this experience, minor modifications were made to the interview schedule. The data from the pilot respondents was included with the rest of the sample for analysis.

Two research assistants completed all the telephone interviewing and the subsequent coding of the open-ended responses. Training was provided to ensure that both

interviewers had a common understanding of the categories in the interview and the codes for the open-ended questions. After a set of approximately 10 interviews, the process was reviewed to ensure consistency.

In a few cases, where the respondent had intellectual or physical disabilities that prevented them from completing the full telephone interview, the respondent's parent, caregiver, or sibling assisted with the interview.

A database of respondents' contact details was developed to help the telephone interviewers track and manage phone calls. From the pilot, it was clear that the best times to call were evenings and weekends. Interviewers were instructed to call once or twice during the day and then try to contact the person only in the evenings or weekend. At least six attempts were made to contact the students in the sample, and each attempt was logged in the database.

Data analysis

The dataset comprised responses from the 321 school leavers referred to above. Codes were developed for the open-ended questions by analysing 20 percent of the interviews for themes. The open-ended questions were coded and the interview schedules were checked before the data were entered into a SAS database.

Frequencies and cross-tabulations for student gender, ethnicity, school decile, age at leaving school, and last year of schooling were run on most variables in the survey dataset. A chi-square test was used for differences between proportions. Where differences were found, the phrases "more likely", "less likely", "statistically significant", or "significant" have been used to indicate statistical significance. Only differences with a probability equal to or more significant than 0.05 have been reported.

When percentages are reported in tables, they are for the number of respondents who replied to that question. In some cases, percentages do not sum to 100 percent; this is due to rounding or the opportunity for multiple responses to some questions.

For some questions there were a small number of non-responses, mostly from respondents with special needs.

Ethnic group categories

Ethnic group categories were combined for the purpose of analysis. Where respondents had ticked two categories, they were put into one group only, in the following order of preference: (1) Maori, (2) Pacific, (3) Asian, (4) Other, or (5) European. Thus, a respondent who ticked both "Maori" and "Asian" was included in the "Maori" category, and a respondent who ticked both "Pacific" and "European" was included in the "Pacific" category. Respondents who ticked three or more categories were included in the "Other" category.

FINDINGS

Respondent variables

The five main variables for respondents in this study were their gender, ethnicity, school decile, age at leaving school, and last year of schooling.

Gender and ethnicity

The respondents included a larger proportion of females (202; 63%) than males (119; 37%). This mirrored the initial sample, which had proportionally more females.

Of the 321 respondents, 216 (67%) were European, 27 (8%) were Maori, 33 (10%) were Pacific, 21 (7%) were Asian, and 24 (8%) were from other ethnic backgrounds or of multiple ethnicity.

Although the numbers of respondents from Maori and Pacific backgrounds were low, the data was analysed by ethnicity on most questions and some differences by ethnicity were found. However, because of the small number of Maori and Pacific respondents, any differences should be viewed as indicative only.

School decile

Table 1 shows the decile of the secondary school that respondents attended in Phase 1 of the study.

Table 1: Sample by School Decile (N=321)

Decile	N	*%*
2	24	*8*
3	35	*11*
4	55	*17*
9	207	*65*
Total	321	*101*

Age and year level

Table 2 shows the age of the students when they completed the Phase 1 questionnaire, and Table 3 shows the year level of the students when they stated that they intended to leave school.

Table 2: Sample by Age in Phase 1 (N=320)

Age	N	*%*
15	7	*2*
16	20	*6*
17	174	*54*
18	107	*33*
19 and over	12	*4*
Total	320	*99*

Table 3: Sample by Last Year of Schooling (N=320)

Year level	N	%
11	9	3
12	34	11
13	248	77
14 (second year 13)	29	9
Total	320	100

Relationships between the main variables

The five main variables were cross-tabulated to check for relationships between them. There was an obvious and expected association between student age and year level.

Also as expected, school decile and student ethnicity were closely related.[2] A third of the Maori respondents in the sample were attending the decile 2 or decile 3 schools, and approximately half of the Pacific respondents were attending the decile 2 school. With proportionately more Asian respondents also attending the decile 2 school, Europeans were a minority in that school. The majority of Europeans in the sample were attending the two decile 9 schools.

These relationships indicate a need for the reader to be aware of the interplay between decile and ethnicity when interpreting the findings in the main body of this report. Table 4 shows the percentage of each ethnic group in the sample attending each school by decile, as well as the totals for each ethnic group and for each school.

Table 4: Student Ethnicity by School Decile (N=321)

	Decile 2		Decile 3		Decile 4		Decile 9*		Total by ethnicity	
Ethnicity of sample students	N	%	N	%	N	%	N	%	N	%
Maori	3	13	6	17	7	13	11	5	27	8
European	4	17	25	72	26	47	161	78	216	67
Pacific	10	42	2	6	15	27	6	3	33	10
Asian	4	17	-	-	6	11	11	5	21	7
Other	3	13	2	6	1	2	18	9	24	7
Total by decile	24	7	35	11	55	17	207	64	321	99

* Two schools

Another significant relationship was that Maori respondents were more likely to be in the lower year levels (and also the younger age groups) of the sample as shown by Table 5.

[2] See footnote 1, p. 1.

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Table 5: Student Ethnicity by Year Level (N=320)

Ethnicity of sample students	Year 11 N	Year 11 %	Year 12 N	Year 12 %	Year 13 N	Year 13 %	Year 14 N	Year 14 %	Total by ethnicity N	Total by ethnicity %
Maori	3	*11*	8	*30*	12	*44*	4	*15*	27	*8*
European	4	*2*	20	*9*	171	*80*	20	*9*	215	*67*
Pacific	-	-	2	*6*	28	*85*	3	*9*	33	*10*
Asian	-	-	2	*10*	19	*90*	-	-	21	*7*
Other	2	*8*	2	*8*	18	*75*	2	*8*	24	*8*
Total by decile	9	*3*	34	*11*	248	*78*	29	*9*	320	*100*

Students in the decile 2, 3, and 4 schools were more likely to be outside the majority school-leaving age group of 17 and 18 years. In short, the two decile 9 schools conformed to the traditional pattern, that is, a higher proportion of 17- and 18-year-olds in year 13, and a higher proportion of Europeans. The lower decile schools tended not to conform to this pattern.

A higher proportion of the Maori students than students from other ethnic groups left school early. Eleven (41%) of the Maori students left school after year 11 or 12, compared with 32 (11%) from the other ethnic groups.

School-leaving qualifications

The majority of respondents (97%) left school with at least one qualification. The highest qualification attained by respondents varied, as shown in Table 6. The most common highest qualification was a B Bursary. Just over half (173; 54%) of the respondents gained direct entrance to university with either an A or B Bursary, or Entrance to University. The majority of respondents (91%) gained this qualification in 1999, in their last year of secondary school. Only nine (3%) left school with no qualifications at all.

Table 6: Highest Qualification Attained (N=321)

Qualification	N	*%*
Unit Standards	12	*4*
School Certificate	14	*4*
Sixth Form Certificate	55	*17*
Framework-based National Certificate	23	*7*
Higher School Certificate	35	*11*
Entrance to University	48	*15*
B Bursary	81	*25*
A Bursary	44	*14*
None	9	*3*
Total	321	*100*

MAIN FINDINGS

Plans and outcomes

When they completed the Phase 1 questionnaire in 1999, four-fifths (262; 82%) of the students planned to pursue further studies either full- or part-time when they left school. Only five percent (15) intended to take up paid work, with no mention of study. Ten percent (32) did not know what they would probably do, while two percent (7) planned to travel overseas.

In 2000, approximately the same proportion of respondents (245; 76%) were studying either full- or part-time as had planned to do so, but a significantly smaller proportion than planned were combining study and paid work. Significantly more respondents than planned were working without studying (73; 23%), and three (1%) were unemployed or on a benefit. Table 7 shows respondents' intentions in 1999, alongside actual activities in 2000.

Table 7: Intended and Actual Activities in 1999 and 2000 (N=321)

	Intended activity in 1999		Actual activity in 2000	
Activity	N	*%*	N	*%*
Study and work	222	*69*	183	*57*
Study only	40	*12*	62	*19*
Work only	15	*5*	73	*23*
Travel	7	*2*	-	-
Other/unemployed	5	*2*	3	*1*
Do not know	32	*10*	-	-
Total	321	*100*	321	*100*

Changing plans

The similarity between the proportions of respondents who intended to study in 2000 (82%), and the proportions who actually did so (76%) provides a deceptively simple picture of the decisions made by these young people. In fact, although the majority of respondents did some of the things they had intended to do in 1999, most changed or developed their plans in some way in the year between Phase 1 and Phase 2.

In 2000, only one-quarter (83; 26%) were doing exactly what they had planned in 1999. The other respondents did some of the things they had planned (63; 20%) or developed their ideas further about exactly what course they wished to study, which institution they wished to study at, or what career they were interested in (129; 40%). A smaller proportion (45; 14%) changed their plans completely. The fact that they had changed or developed their plans further was something that most respondents had in common. There were no significant variations on this question by gender, ethnicity, school decile, age, or last year of schooling.

A variety of reasons were given by 238 respondents as to why they had developed or changed their plans. These reasons were:

- study experiences (78; 33%)
- developing a personal interest in an area (72; 30%)
- changing their mind in general about their career (41; 17%)
- receiving new information (34; 14%)
- grades or qualifications gained at school (29; 12%)
- financial constraints (28; 12%)
- work experiences (23; 10%)
- family reasons (21; 9%)
- finding work or being offered a job (13; 5%)
- wanting a year off studying (13; 5%)
- another career having better job prospects or paying better (12; 5%)
- needing more qualifications or training (11; 5%)
- not getting into their first choice of course (5; 2%)
- other reasons (19; 8%), for example, getting a scholarship.

Of those who had changed or developed their plans in some way, a few respondents (15; 6%) indicated that their plans were changing all the time. A number of respondents (39; 16%) had decided to work without studying, rather than study only, or combine study with work. The main reason for this change in plans, given by 15 of these respondents, was the cost of study.

A slightly smaller group (34; 14%) had changed their plans because of new information they had received. This information came from a range of sources, the most common being family and friends (19; 8%), a liaison person at the institution they were attending (8; 3%), or the media (6; 3%).

The study experiences these young people had were the main factor helping them to further shape their study paths and career plans. These results indicate that for these young people, the first year out of school was an important transition time in which many decisions were changed or confirmed.

Unsure about plans

The 32 respondents (10%) who did not have firm transition plans in 1999 when they left school were less likely to be studying than the other respondents. In 2000, only half of this group (16; 50%) were studying, just under half (14; 44%) were working without studying, and two were unemployed. Those respondents who intended to study, but were unsure of the institution they would study at, were less likely to be studying at university and more likely to be completing non-degree programmes, such as those provided by Private Training Establishments (PTEs), than the other respondents.

These 32 respondents tended to have studied at the lower decile schools and to be of Pacific background, but this relationship was not significant.

Study intentions and activities

Study intentions in 1999

In 1999 the majority of students (262; 82%) intended to carry on to tertiary study. There were no significant differences in intended study activities by gender. However, these intentions varied by decile, ethnicity, age, and last year of schooling.

Study intentions by ethnicity

Study intentions differed significantly by ethnicity, as shown in Table 8. All the Asian students intended to study (21; 100%). Maori had the lowest proportion of any of the ethnic groups intending to study (19; 70%). Although this sample is small, these data are indicative of a trend for less tertiary participation by Maori. This difference is likely to be due in part to the lower age at which most Maori respondents left school.

Table 8: Study Intentions in 1999 by Ethnicity (N=321)

	Any Study		No Study		Don't Know	
Ethnicity	N	*%*	N	*%*	N	*%*
Maori	19	*70*	6	*22*	2	*7*
European	173	*80*	19	*9*	24	*11*
Pacific	26	*79*	1	*3*	6	*18*
Asian	21	*100*	-	-	-	-
Other	23	*96*	1	*4*	-	-
Total	262	*82*	27	*8*	32	*10*

Study intentions by school decile

Students' study intentions in 1999 differed significantly by decile, as shown in Table 9. Proportionately fewer students (60%) from the decile 3 school planned to study, compared with approximately 80 percent of the decile 2, 4, and 9 students.

Table 9: Study Intentions in 1999 by School Decile (N=321)

	Any Study		No Study		Don't Know	
Decile	N	*%*	N	*%*	N	*%*
2	18	*75*	3	*13*	3	*13*
3	21	*60*	9	*26*	5	*14*
4	44	*80*	4	*7*	7	*13*
9	179	*86*	11	*5*	17	*8*
Total	262	*82*	27	*8*	32	*10*

Study intentions by age and last year of schooling

Students who were in year 12 or higher (and students who were aged 16 and over) when they intended to leave school were more likely to have plans for 2000 that included the intention to study. This was not the case for younger students, half of whom intended to work in 2000.

Study activities in 2000

Actual study activities by ethnicity

As with respondents' study intentions, there were no significant differences in actual study activities by gender. However, paralleling the data on intentions, the likelihood of undertaking tertiary study varied significantly by ethnicity, as Table 10 shows. The majority of Asian (20; 95%) and European (168; 78%) respondents continued on to tertiary study. A significantly smaller proportion, approximately half (13; 48%), of the Maori respondents did the same. Pacific respondents also tended not to carry on to tertiary study. Maori and Pacific respondents tended to have an intention to study which was not carried out, with 70 percent of Maori intending to study, but only 48 percent actually doing so, and 79 percent of Pacific respondents intending to study, but 67 percent doing so. Although the Maori and Pacific samples are small, these data are indicative of a trend for markedly less tertiary participation by Maori directly after leaving school, and a higher rate of attrition between secondary school and tertiary study for Maori and Pacific groups than for other ethnic groups.

Table 10: Actual Study Activities in 2000 by Ethnicity (N=321)

	Any Study		No Study	
Ethnicity	N	*%*	N	*%*
Maori	13	*48*	14	*52*
European	168	*78*	48	*22*
Pacific	22	*67*	11	*33*
Asian	20	*95*	1	*5*
Other	22	*92*	2	*8*
Total	245	*76*	76	*24*

Actual study activities by school decile

In 2000, the proportions of decile 2, 3, and 9 respondents who did study were relatively similar to the intended proportions. However, the proportion of decile 4 respondents dropped from 80 percent who intended to study to 65 percent who did so. As Table 11 shows, respondents from the decile 3 and 4 schools were less likely to study than their counterparts from the decile 2 and 9 schools.

Table 11: Actual Study Activities in 2000 by School Decile (N=321)

	Any Study		No Study	
Decile	N	*%*	N	*%*
2	20	*83*	4	*17*
3	21	*60*	14	*40*
4	36	*65*	19	*35*
9	168	*81*	39	*18*
Total	245	*76*	76	*24*

Actual study activities by age and last year of schooling

In 2000, most of the respondents who left school after year 13 or 14, and who were aged 17 and over, tended to act on their intentions. Most of these respondents (almost 80%) were engaged in tertiary study, whereas the younger respondents were less likely to be studying.

Younger respondents (aged 15/16, or in year 11 or 12 in their last year at school) were also more likely to have changed their plans over the year. In 1999, only two of the seven 15-year-olds intended to study. In 2000, this position was reversed, with five studying and two working. The pattern for the 20 students aged 16 was the reverse, with 17 (85%) intending to study in 2000, but in fact only nine (45%) doing so. These findings show a trend for lower participation in tertiary study by younger respondents. But because of the small numbers involved, it is difficult to interpret these findings in any more detail.

Combining work and study

Intending to combine work and study in 1999

Of the 262 people who stated in 1999 that they intended to study, over four-fifths (222; 85%) intended to combine work and study. On the whole, the intention to combine work and study was shown by similar proportions of students across different genders, ethnic groups, deciles, ages, and year of schooling. Most intended to study full-time and work part-time (157; 71%). A small proportion (34; 13%) intended to study part-time and work either full- or part-time. Only two intended to both work and study full-time.

Actually combining work and study

In 2000, three-quarters (183) of the 245 people who were studying also worked. This was a significantly lower proportion than had intended to do this in 1999. The majority (162; 89%) combined full-time study with part-time or casual work, or community work. Another 15 (8%) were both studying and working full-time, whereas only two had planned to do this. Only six (3%), many fewer than intended, were studying part-time; of these, five were working full-time and one was working part-time or casually.

Unlike the proportions intending in 1999 to combine work and study, the proportions actually doing so in 2000 varied by both ethnicity and decile. In 2000, Pacific respondents were the least likely to combine work and study (12; 55%), and Europeans were the most likely (134; 80%). For every ethnic group, the proportion who actually combined study and work in 2000 was lower than the intended proportion. The difference between the two was largest for Maori respondents, of whom 18 (90%) had intended to combine study and work, but only 10 (77%) did so.

In 1999, a small group (6) of decile 2 and 3 respondents was planning to study without working. Interestingly, in 2000 three times as many (18; 60%) were doing so.

So while many respondents had intended to combine study and work, they did not manage to realise their work plans. This information indicates that Pacific and Maori respondents and those from the lower decile schools found acting on their intentions to combine work and study more difficult than other respondents did.

Study institution

Attending university and pursuing degrees were the most popular intended and actual study choices of respondents, as Table 12 shows. Of the 243 respondents who specified which type of institution they were actually studying at in 2000, 151 (62%) were at university, 39 (16%) were at polytechnic, 8 (3%) were at a college of education, and 45 (19%) were at another type of institution (mostly PTEs). There was little difference between respondents' intended and actual study institutions, except for the "other" category. In 2000, significantly more respondents than had planned to do so were studying at other institutions. A large proportion of the people in this category had been undecided about their plans in 1999. In 2000, this group of respondents tended to be studying at non-mainstream tertiary study options, such as those provided by PTEs.

Table 12: Intended and Actual Study Institution in 1999 (N=262) and 2000 (N=243)

	Intended institution in 1999		Actual institution in 2000	
Institution	N	*%*	N	*%*
University	154	*59*	151	*62*
Polytechnic	40	*15*	39	*16*
College of Education	13	*5*	8	*3*
Other	12	*5*	45	*19*
Do not know	43	*16*	-	-
Total	262	*100*	243	*100*

There was little difference between males and females regarding intended and actual tertiary institutions.

Intended study institution in 1999

Intended study institution by ethnicity

For students from all ethnic groups, study at university was planned more than study at any other institution, as Table 13 shows. Although the figures were not significant, proportionately fewer Maori students planned to attend university and proportionately more Pacific students planned to attend polytechnics, relative to other ethnic groups. Maori students were less likely than other ethnic groups to know which institution they planned to attend.

Table 13: Intended Study Institution in 1999 by Ethnicity (N=262)

	University		Polytechnic		College of Education		Other		Don't Know	
Ethnicity	N	*%*	N	*%*	N	*%*	N	*%*	N	*%*
Maori	7	*37*	1	*5*	1	*5*	2	*11*	8	*42*
European	102	*59*	29	*17*	10	*6*	7	*4*	25	*14*
Pacific	16	*62*	5	*19*	-	-	2	*8*	3	*12*
Asian	15	*71*	2	*10*	-	-	1	*5*	3	*14*
Other	14	*61*	3	*13*	2	*9*	-	-	4	*17*
Total	154	*59*	40	*15*	13	*5*	12	*5*	43	*16*

Intended study institution by decile

In 1999, students attending the two lowest decile schools (2 and 3) were less likely to intend to go to university and more likely to intend to go to polytechnics, as Table 14 shows. In contrast, over half of the decile 4 students (24; 55%) and decile 9 students (120; 67%) planned to attend university the year after leaving school.

Table 14: Intended Study Institution in 1999 by Decile (N=262)

	University		Polytechnic		College of Education		Other		Do Not Know	
Decile	N	*%*	N	*%*	N	*%*	N	*%*	N	*%*
2	7	*39*	4	*22*	2	*11*	1	*6*	4	*22*
3	3	*14*	6	*29*	2	*10*	4	*19*	6	*29*
4	24	*55*	5	*11*	1	*2*	4	*9*	10	*23*
9	120	*67*	25	*14*	8	*4*	3	*2*	23	*13*
Total	154	*59*	40	*15*	13	*5*	12	*5*	43	*16*

Intended study institution by age and last year of schooling

Students' intended institution varied significantly depending on their last year of schooling and their age. Table 15 shows students' intended institution by their last year of schooling. Students in year 13 (and students aged 17 or 18) were more likely to intend to study at university, and were more likely to be able to name the institution they would study at, than students in other year levels (or age groups). These results are not surprising; one of the main possible destinations for year 13 students is tertiary study at university, whereas students who leave school after year 11 would not have completed the necessary qualifications for university study.

Table 15: Intended Study Institution in 1999 by Last Year of Schooling (N=261)

	University		Polytechnic		College of Education		Other		Don't Know	
Year	N	*%*	N	*%*	N	*%*	N	*%*	N	*%*
11	-	-	1	*33*	-	-	-	-	2	*67*
12	7	*25*	7	*25*	-	-	1	*4*	13	*46*
13	139	*66*	31	*15*	10	*5*	9	*4*	22	*10*
14	8	*42*	1	*5*	2	*11*	2	*11*	6	*32*
Total	154	*59*	40	*15*	12	*5*	12	*5*	43	*16*

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Actual study institution in 2000

Actual study institution by ethnicity

There were no significant differences by gender or ethnicity in the type of study institution chosen by respondents, although a lower proportion of Pacific respondents attended university compared with respondents from other ethnic groups. Proportionally more Maori and Pacific students attended "Other" types of institutions. Table 16 shows the institutions chosen by ethnicity.

Table 16: Study Institution in 2000 by Ethnicity (N=243)

	University		Polytechnic		College of Education		Other	
Ethnicity	N	*%*	N	*%*	N	*%*	N	*%*
Maori	8	*62*	1	*7*	-	-	4	*31*
European	104	*63*	29	*17*	5	*3*	28	*17*
Pacific	12	*55*	3	*14*	1	*5*	6	*27*
Asian	13	*65*	3	*15*	-	-	4	*20*
Other	14	*64*	3	*14*	2	*9*	3	*14*
Total	151	*62*	39	*16*	8	*3*	45	*19*

Actual study institution by decile

Respondents who had attended the two high decile schools were more likely to study at university than their counterparts from the lower decile schools (Table 17). Almost three-quarters (120; 73%) of the respondents who had attended the two decile 9 schools attended university, compared with 40 percent (31) of the respondents from the other schools. Respondents from the lower decile schools were more likely to be studying with other tertiary providers, such as PTEs.

Table 17: Study Institution in 2000 by Decile (N=243)

	University		Polytechnic		College of Education		Other	
Decile	N	*%*	N	*%*	N	*%*	N	*%*
2	7	*35*	4	*20*	3	*15*	6	*30*
3	5	*24*	4	*19*	2	*10*	10	*48*
4	19	*53*	5	*14*	1	*3*	11	*31*
9	120	*73*	26	*16*	2	*1*	18	*11*
Total	151	*62*	39	*16*	8	*3*	45	*19*

Actual study institution by age and last year of schooling

Respondents who were aged 17 or 18 were more likely to go to university than respondents from other age groups (Table 18). A similar pattern was shown by respondents' last year of schooling. Respondents who left school after year 13 were more likely to go to university than respondents who left after years 11, 12, or 14.

Table 18: Study Institution in 2000 by Age (N=242)

	University		Polytechnic		College of Education		Other	
Age	N	*%*	N	*%*	N	*%*	N	*%*
15 or 16	4	*29*	3	*21*	-	-	7	*50*
17 or 18	147	*67*	33	*15*	5	*2*	35	*16*
19 or over	-	-	3	*38*	3	*38*	2	*25*
Total	151	*62*	39	*16*	8	*3*	44	*18*

Intended and actual qualifications

Type of qualification

In 2000, respondents' actual type of qualification was significantly different from their intended type of qualification in 1999. In 2000, the majority (60%; 148) of respondents who were studying were enrolled in degree programmes, as intended in 1999 (69%; 181) (Table 19). But overall, significantly fewer respondents were enrolled in degree programmes, and significantly more were enrolled in diploma and other qualifications, or Youth Training and TOPs, than intended in 1999.

Table 19: Qualification Type in 1999 (N=262) and 2000 (N=245)

	1999		2000	
Qualification type	N	*%*	N	*%*
Degree	181	*69*	148	*60*
Diploma or other qualification	36	*14*	75	*31*
Youth Training/(TOPs)	3	*1*	23	*9*
Don't know	42	*16*	-	-
Total	262	*100*	246*	*100*

* *One respondent had completed two courses in the space of one year.*

Variations in intended qualification in 1999

There were no significant differences between students' intended type of qualification by gender or ethnicity, although a lower proportion of Maori and Pacific students than other ethnic groups intended to study for a degree. As expected, students who intended to leave school after year 13 (or were aged 17 or 18) were more likely to intend to pursue a degree course than other students.

Table 20 shows students' intended type of qualification by decile. Students at the two decile 9 schools were more likely to intend to pursue a degree course than students from the three lower decile schools.

Table 20: Intended Qualification Type in 1999 by Decile (N=262)

	Degree		Diploma or other qualification		Youth Training/TOPs		Don't know/did not indicate	
Decile	N	*%*	N	*%*	N	*%*	N	*%*
2	10	*56*	3	*17*	2	*11*	3	*17*
3	9	*43*	9	*43*	-	-	3	*14*
4	21	*48*	12	*27*	1	*2*	10	*23*
9	141	*79*	12	*7*	-	-	26	*15*
Total	181	*69*	36	*14*	3	*1*	42	*16*

Variations in qualification studied for in 2000

As with respondents' intended qualification, there were no significant differences in the qualification actually being studied for in 2000 by gender or ethnicity, although there was a trend for lower Maori and Pacific participation in degree courses. Of the 13 Maori students who indicated what type of qualification they were studying for, only five (38%) were studying for a degree, and seven (54%) were studying for a diploma or another qualification. These figures were similar for Pacific respondents, with 10 (45%) enrolled in a degree programme, and 11 (50%) studying for a diploma or another qualification. By contrast, 70 percent of the Asian students and 61 percent of the European students were studying for a degree.

As would be expected, and as shown by respondents' intentions, the type of qualification studied for in 2000 varied by respondents' age when they left school and their level in their last year of schooling. Among those who were studying in 2000, 141 (64%) of the 222 respondents aged 17 or 18 when they left school were completing a degree course. The youngest respondents, aged 15 when they left school (mostly year 11 students), were almost all attending Youth Training courses or TOPs. The majority of those who were aged 16 when they left school (mostly year 12 students) were studying for a diploma or other non-degree qualification. The oldest respondents, aged 19 or over when they left school, also tended to be studying for a diploma or other non-degree qualification.

Again as with their intentions, the type of qualification respondents were actually studying for in 2000 varied by decile (Table 21). Respondents from the two decile 9 schools were more likely to be studying for a degree than respondents from the decile 3 school.

Table 21: Actual Qualification Studied For in 2000 by Decile (N=245)

	Degree		Diploma or other qualification		Youth Training/TOPs	
Decile	N	*%*	N	*%*	N	*%*
2	8	*40*	10	*50*	2	*10*
3	6	*29*	8	*38*	7	*33*
4	15	*42*	19	*53*	2	*6*
9	118	*70*	38	*23*	12	*7*
Total	147	*60*	75	*31*	23	*9*

Qualification area

In 1999, respondents were asked to name the area of the qualification they planned to study in 2000. They were later asked what qualifications they had actually studied for that year. These intended and actual qualifications were categorised into related areas, using the categories in the publication *Courses Galore 2000-2001* (Career Service Rapuara, 2000). Table 22 shows respondents' qualification area intentions in 1999 and their actual activities in 2000. Respondents' intentions and actual qualification area did not show any significant changes between 1999 and 2000.

Table 22: Qualification Area Intentions in 1999 (N=259) and Activities in 2000 (N=245)

	Intentions in 1999		Activities in 2000	
Qualification area	N	*%*	N	*%*
Business/finance/insurance/conjoint business	37	*14*	51	*21*
General arts/social sciences/humanities	32	*12*	33	*13*
Tourism/recreation/sport/hospitality	29	*11*	40	*16*
Health/community/social services	23	*9*	18	*7*
Design/fine art/performing arts	22	*8*	18	*7*
Science/environment	20	*8*	26	*11*
Computing/information technology/mathematics/statistics	12	*5*	19	*8*
Education	16	*6*	7	*3*
Law/conjoint law	15	*6*	13	*5*
Engineering/architecture	6	*2*	13	*5*
Media	5	*2*	2	*1*
Construction/electricity/gas/water supply	3	*1*	3	*1*
Other/other conjoint	3	*1*	2	*1*
Not sure	36	*14*	-	-
Total	259	*99*	245	*99*

Variations in qualification area

In 1999, students from the decile 2 and 3 schools were most likely to respond "I don't know" when asked to name the qualification area they intended to study. Maori and Pacific respondents also indicated that they were unsure of the qualification area they intended to study in larger proportions than the other ethnic groups. Similar variations were also evident by age and last year of schooling. More of the younger students (year 11 and 12) and those aged 19 or over (year 14) tended to be unsure of the area they intended to study, compared with those who were 17 or 18 (mostly year 13).

Intended and actual qualification area was one of the few fields in this study that showed significant differences by gender. The study area preferences of females and males tended to conform to areas traditionally dominated by their gender. Proportionately more females intended to pursue, and did pursue, qualifications in:

- General arts, social sciences, and humanities
- Tourism, recreation, sport, and hospitality
- Health, community, and social services

- Design, fine art, and performing arts
- Education
- Business, finance, insurance, or conjoint business.

Proportionately more males intended to pursue and did pursue qualifications in:

- Science and the environment
- Computing, information technology, mathematics, and statistics
- Engineering and architecture
- Construction, electricity, gas, and water supply.

The qualification area data for respondents were not examined more closely by decile, ethnicity, age, and last year of schooling, because of the small number of respondents in each category.

Employment types and aspirations

To categorise respondents' current employment types and career aspirations, their responses were coded using the census categories from *the New Zealand Standard Classification of Occupations 1999* (Departments of Statistics, 1999). Most of the respondents (256; 80%) were employed or had been employed at some stage in 2000. Respondents' career aspirations had focused on professional occupations. However, most were currently employed in occupational categories that required lower skill levels, such as services and sales or clerks (Table 23).

Current employment

Respondents who were both working and studying were engaged in significantly different types of employment from those who were not studying. Those who were also studying were more likely to be employed in services and sales; those who were not studying were more likely to be clerks as shown by Table 23. This difference is hardly surprising, because many of the students who were working part-time had jobs that fitted around their study timetable, such as café or bar work.

Table 23: Actual Work Activities in 2000 by Study (N=256)

	Studying and working		Working only		Total	
Work type	N	*%*	N	*%*	N	*%*
Service and sales	118	*64*	34	*47*	152	*59*
Clerks	32	*17*	20	*27*	52	*20*
Professionals	9	*5*	-	-	9	*4*
Plant and machine workers	6	*3*	6	*8*	12	*5*
Trade workers	5	*3*	3	*4*	8	*3*
Elementary occupations	4	*2*	6	*8*	10	*4*
Technicians and associated professionals	4	*2*	1	*1*	5	*2*
Legislators and managers	3	*2*	2	*3*	5	*2*
Agriculture and fisheries	-	-	1	*1*	1	*0*
Other	2	*1*	-	-	2	*1*
Total	183	*99*	73	*99*	256	*100*

Career aspirations

Overall, career aspirations did not change significantly between 1999 and 2000. However, in 1999 just under half (154; 48%) of both the males and the females did not know their intended career or job title. The most likely response to this question, from both male and female students, was "I don't know". By the end of 2000, significantly more of these young people had a firmer idea of where they were heading career-wise, with only 29 percent still being unsure of the area they would like to work in. Table 24 shows the career aspirations of respondents in 1999 and 2000.

Table 24: Career Aspirations in 1999 and 2000 (N=321)

	1999		2000	
Work type	N	*%*	N	*%*
Professionals	68	*21*	85	*27*
Technicians and associated professionals	42	*13*	63	*20*
Service and sales workers	34	*11*	42	*13*
Clerks	6	*2*	16	*5*
Trade workers	6	*2*	5	*2*
Legislators and managers	4	*1*	7	*2*
Agricultural and fisheries workers	4	*1*	3	*1*
Plant and machine workers	-	-	1	*0*
Elementary occupations	-	-	2	*1*
Other	3	*1*	5	*2*
Don't know	154	*48*	92	*29*
Total	321	*100*	321	*102*

It seems that the study and work experiences these young people had in 2000 gave them the basis for making further career decisions. These data indicate that for these young people, the first year out from school was an important time for career decision-making. In contrast to the unskilled or semi-unskilled jobs these young people were currently employed in, most had aspirations to work in professional or technical careers.

Career aspirations in 1999

In 1999, the most frequent answer to a question about career aspirations, given by students from all deciles, was "I don't know". Males and females both indicated occupations in the "Professionals" category as their next most common response. Similarly, the "Professionals" category was the next most common response for decile 2, 3, and 9 students; but for decile 4 respondents, it was the "Services and sales" category.

By ethnicity, the most common response for all groups was "I don't know". The next most common response was "Technicians and associated professionals" for Asian respondents, "Professionals" for Europeans, Pacific, and Other respondents, and "Services and sales" for Maori.

In terms of last year of schooling, "I don't know" responses came first. The next most common response for year 11 and 12 students was "Services and sales", whereas for year 13 and 14 students, it was "Professionals".

Career aspirations in 2000

In 2000, the pattern of intended careers was similar to the 1999 pattern, except that more respondents now had an idea of the career they were interested in. Yet the most common answer to the question about career aspirations in 2000 was still "I don't know", although this differed according to some variables. The most common response for female respondents was categorised as "Professionals", and for males, "I don't know", followed by "Professionals". In terms of ethnicity, the most frequent response to the career aspirations question in 2000 by Maori and European students was "I don't know", followed by the "Professionals" category for Europeans, and "Services and sales" for Maori. The most common category for Asian respondents was "Technicians and associated professionals"; for Pacific and other respondents, it was "Professionals".

In terms of age, older students responded, in about equal numbers, either "I don't know", or "Professionals", whereas "I don't know" and "Services and sales" were the two most common categories for younger students.

In 2000, the most common occupational category that responses from decile 2 and 4 respondents fell into was "Professionals"; for decile 3 respondents, it was "Technicians and associated professionals"; and for decile 9 respondents, it was "I don't know", followed by "Professionals". Interestingly, compared with decile 9 respondents, a larger proportion of decile 2, 3, and 4 respondents had an idea of the career they were working towards. The reasons for this are unclear; it could be that more decile 9 respondents were engaged in degree programmes that took longer to complete and were not as vocationally based as the types of study programmes in which the lower decile respondents were engaged.

Motivations for career aspirations

The 229 respondents who had a job or a career area that they were working towards in 2000 were asked about their main reasons for choosing this area. The most frequent response, given by 160 (70%) of those who answered this question, fitted into the general category of "personal interest". Many respondents found it difficult to quantify in more

exact terms what it was that drew them to a particular area. Some more specific reasons behind their career decisions were suggested by these young people, for example:

- work in this area offered the opportunities or environment that they desired, such as being able to travel with their job, or undertaking a variety of tasks (62; 27%)
- they were good at, or enjoyed, the subject area when they studied it (60; 26%)
- they wanted to work with people or children (52; 23%)
- the job was a good career or had good prospects (29; 13%)
- they had developed an interest in the job though work experience (19; 8%).

Most of the reasons given by these young people had more to do with intrinsic satisfaction than with money, which was mentioned directly by only 20 (9%) of the respondents.

Variations in motivation

Answers to the question about motivation showed some variation by gender. Females tended to be more motivated by the fact that they were good at, or enjoyed, the subject area that led to their chosen career, the opportunities and environment the career offered, or the fact that they would be working with people. Males were slightly more inclined to report that they were motivated by the fact that their chosen career had good prospects or would earn them more money.

Asian and European respondents tended to indicate in larger proportions than other ethnic groups that "personal interest" was the main motivation behind their chosen career area. Pacific respondents tended to be more motivated by the fact that they were good at, or enjoyed, the subject area that led to their chosen career, or by the opportunities and environment offered by the occupation in question. Maori and Asian respondents were also more motivated by the opportunities and environment offered by their chosen career than were Europeans.

Being good at, or enjoying, the subject area that led to their chosen career; and the opportunities and environment offered by their chosen occupation were more important to respondents from the decile 2, 3, and 4 schools than to those from the decile 9 schools.

Information sources

Used, desired, and useful information sources in 1999

In 1999 students who did not intend to return to secondary school were asked three questions about the information sources they used in deciding what to do in 2000:

- If you know what you are likely to be doing next year, which of the following sources of information helped you decide?
- Thinking back to when you decided what to do next year, which, if any, of the following sources of information would you like to have had then to help you decide?
- If you don't know yet what you are likely to be doing next year, which of the following sources of information would you like to have to help you decide?

Table 25 provides a summary of respondents' answers to these questions.

The information source most often used in 1999 was "Family members and relatives", followed by "Brochures, pamphlets or handbooks put out by universities or polytechnics", then "Careers information service at school", "Peers/own age group friends", and "University/polytechnic liaison officer/s".

"Family members and relatives" was also most often mentioned as a possible information source by those who had not yet made a decision about what they were going to do in 2000.

The information sources used by respondents were not necessarily useful. When those who had decided what they were going to do in 2000 were asked about the information sources they would have liked to have had (but did not), they tended to mention sources that provided opportunities for "hands-on" interaction (such as work experience) or personal contact with career-related professionals (such as liaison officers), rather than family and friends.

Table 25: Information Sources Actual Used in 1999 (N=254), Desired but not Used (N=81), and Wanted for the Future (N=36)

	Sources used in 1999 decision (N=254)		Sources would have liked to have had in 1999 (N=81)		Sources wanted by those who were unsure (N=36)	
Information source	N	%	N	%	N	%
Family members/relatives	174	*69 (1st)*	32	*40 (5th)*	26	*72 (1st)*
Brochures/pamphlets or handbooks put out by universities or polytechnics	147	*58 (2nd)*	30	*37*	19	*53 (3rd)*
Careers information service at school	145	*57 (3rd)*	36	*44 (3rd)*	20	*55 (2nd)*
Peers/own age group friends	105	*41 (4th)*	22	*27*	16	*44*
University/polytechnic liaison officer/s	95	*37 (5th)*	38	*47 (1st)*	18	*50 (4th)*
Family friends	89	*35*	19	*23*	11	*31*
School teacher/s	83	*33*	33	*41 (4th)*	17	*47 (5th)*
Careers Expo	78	*31*	27	*33*	12	*33*
Work experience	64	*25*	37	*46 (2nd)*	12	*33*
Print media (newspapers, magazines, books)	47	*19*	17	*21*	10	*28*
Television	39	*15*	17	*21*	15	*42*
Internet websites	42	*17*	18	*22*	9	*25*
Radio	14	*6*	12	*15*	13	*36*
STAR or LINK course at school	11	*4*	16	*20*	4	*11*
Other	23	*9*	4	*5*	2	*6*

Variations in information sources used in 1999

There was very little variation in the types of information sources most frequently used according to gender, ethnicity, age, or last year of schooling. The three most often used sources were almost always in the same order for all groups:

1st – Family members and relatives
2nd – Brochures, pamphlets, or handbooks put out by universities or polytechnics
3rd – Careers information service at school.

However, there was some variation in the information sources used according to decile, as Table 26 shows. The most frequently used source of information for decile 2, 3, and 4 respondents was the "Careers information service" at their secondary school, while "Family members and relatives" was the most frequently used source for decile 9 respondents. It is likely that the parents of students attending decile 9 schools did themselves have tertiary education, and were therefore able to offer advice. Parents of students at the lower decile schools were less likely to be in this position. This highlights the important role of the careers service for students in the lower decile schools.

Table 26: Top Four Most Often Used Information Sources in 1999 by Decile (N=254)

Decile 2	Decile 3	Decile 4	Decile 9
1st equal: careers information service at school	*1st:* careers information service at school	*1st:* careers information service at school	*1st:* family members/relatives
1st equal: liaison officer/s	*2nd:* family members/relatives	*2nd:* family members/relatives	*2nd:* brochures or handbooks
2nd equal: work experience	*3rd equal:* family friends	*3rd:* brochures or handbooks	*3rd:* careers information service at school
2nd equal: family members/relatives	*3rd equal:* brochures or handbooks	4th: Careers Expo	*4th:* peers

Used and most useful information sources for 2000

In 2000, respondents were again asked to indicate which information sources on a given list they had used to make their study and work decisions for 2000. This list was an expanded version of the Phase 1 questionnaire list. Respondents were also asked to indicate the three sources that they found the most useful. Table 27 shows the results. It also shows the number of people who found an information source useful, presented as a percentage of those who used it, and ranks the usefulness of each information source accordingly.

Most respondents (292; 91%) used more than one source; the average number used was six. On the whole, as in 1999, "Family members and relatives" was the most frequently *used* source of information for these young people. This source was also mentioned the most frequently as *useful*.

"Other" category involved direct contact with people employed in the field which the respondent was interested in. For example, respondents who were interested in a career as an early childhood teacher might talk to people who worked at early childhood centres, or to builders if they had an interest in building as a career. The fact that respondents rated these types of interactions highly supports the idea that informed individual personal contact is a very important source of information for young people making career decisions. These data show that, on the whole, the young people found personal contact and "hands-on" or interactive sources of information, such as visits by liaison officers, more useful than impersonal sources such as websites or databases. However, the brochures and handbooks published by universities and polytechnics seem to be an exception to this trend.

Variations in information sources used in 2000

As in 1999, there was very little variation in the types of information sources most frequently used according to gender, age group, or last year of schooling. Larger proportions of Pacific respondents than of other groups mentioned using teachers and print media as information sources.

As in 1999, there was some variation in the information sources used according to decile (Table 28). The list of information sources used in this study can be divided into four categories: "personal-based", for example, family, relatives, and peers; "school-based", for example, teachers and the careers information service at school; "employment-based", for example, work experience; and "tertiary-based", for example, university handbooks, Careers Expos, and liaison officers. Respondents from the lower decile schools tended to use school-based or tertiary-based information sources external to their home environment, such as their school's careers service, brochures or handbooks, and teachers. By contrast, respondents from the decile 9 schools tended to use personal-based information sources, such as family and friends.

This information again supports the importance of the careers service and careers information at lower decile schools. Yet it was the employment-based sources involving direct contact with people employed in the field the respondent was interested in which were rated as the most useful.

Table 28: Top Four Most Often Used Information Sources in 2000 by Decile (N=292)

Decile 2	Decile 3	Decile 4	Decile 9
1st: careers information service at school	*1st:* careers information service at school	*1st:* brochures or handbooks	*1st:* family members/relatives
2nd: brochures or handbooks	*2nd:* school teachers	*2nd:* family members/relatives	*2nd:* brochures or handbooks
3rd: friends and peers	*3rd:* friends and peers	*3rd:* careers information service at school	*3rd:* friends and peers
4th equal: family members/relatives and liaison officers	*4th:* family members/relatives	4th: print media	*4th:* family friends

Table 27: Used (N=292) and Most Useful (N=269) Information Sources in 2000

	Used (N=292)		Most useful (N=269)		'Useful' percent	'Useful' ranking
Sources	N	*%*	N	*%*	*%*	Rank
Family members and relatives	204	*70*	97	*36*	*48*	3rd
Brochures or handbooks put out by universities or polytechnics	194	*66*	84	*31*	*43*	5th
The careers information and advice service at your school	168	*58*	82	*31*	*49*	2nd
Your friends and peers	161	*55*	44	*16*	*27*	12th
Family friends	144	*49*	28	*10*	*19*	16th
University or polytechnic open days	141	*48*	43	*16*	*31*	9th
School teachers	122	*42*	38	*14*	*31*	8th
University or polytechnic visitors or liaison officers	85	*29*	37	*14*	*44*	4th
Print media such as newspapers, magazines, and books	79	*27*	23	*9*	*29*	10th
Careers Expo	69	*24*	22	*8*	*32*	7th
Other careers talks or seminars by visiting businesses, the army, etc.	62	*21*	17	*6*	*27*	11th
Transition courses or work experience organised at your school	56	*19*	12	*5*	*21*	14th
Other Internet websites	52	*18*	11	*4*	*21*	15th
Other work experience	47	*16*	15	*6*	*32*	6th
TV	43	*15*	6	*2*	*14*	18th
Quest database	34	*12*	5	*2*	*15*	17th
Radio	34	*12*	3	*1*	*9*	20th
STAR courses	23	*8*	5	*2*	*15*	17th
KiwiCareers Internet website	22	*8*	3	*1*	*14*	19th
Other	21	*7*	11	*4*	*52*	1st
Careerpoint telephone careers information	8	*3*	-	-	-	21st

There are a number of possible reasons for family members being mentioned so frequently as an information source. The two main reasons are probably that family members are easily accessible, and are likely to be interested in the career plans of the younger members of their family, so they will offer advice. Another possible explanation is that family members were reported frequently as an information source because of an absence of other sources.

Interestingly, although a high percentage of respondents mentioned their own friends and peers and family friends as information sources, the percentage of users who rated these sources as "useful" was not nearly as high. The fact that a source is widely used does not make it a good one! When the number of people who found a source useful was presented as a percentage of those who used it, "Friends and peers" dropped from a ranking of 4th to 12th, and "Family friends" from 5th to 16th.

The category "Other" was rated as "useful" by 11 of the 21 respondents who indicated that they had used sources of information which were not on the list. This was the highest rating of "usefulness" received by any category. Most of the sources in

Sufficiency of information for transition decisions

In both 1999 and 2000, respondents were asked if they had been given enough information to help them decide what they wanted to do in 2000. In 1999, only the respondents who had decided on their plans for 2000 answered this question. Table 29 compares respondents' answers in 1999 and 2000. In both years, the majority of respondents – 165 (64%) in 1999 and 217 (68%) in 2000 – indicated that they did have enough information to help them make transition decisions. The proportions who were "Not sure" if they had enough information fell from 12 percent in 1999 to 2 percent in 2000.

Table 29: Sufficiency of Information in 1999 (N=257) and 2000 (N=318)

	Sufficient information in 1999		Sufficient information in 2000	
	N	%	N	%
Yes	165	*64*	217	*68*
No	61	*24*	95	*30*
Not sure	31	*12*	6	*2*
Total	257	*100*	318	*100*

Sufficiency of information in 1999

In 1999, the 257 respondents who had decided what they were going to do next year generally felt they had enough information to help them decide (165; 64%). There were no significant differences for this question by any of the main variables in this study, although a larger proportion of both Maori students (14; 78%) and European students (113; 65%), stated that they had enough information, compared with Asian students (9; 47%). Table 30 shows students' views on whether they had enough information in 1999 by ethnicity.

Table 30: Sufficiency of Information by Ethnicity in 1999 (N=257)

	Maori		European		Pacific		Asian		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Yes	14	*78*	113	*65*	12	*52*	9	*47*	17	*71*	165	*64*
No	3	*17*	40	*23*	8	*35*	5	*26*	5	*21*	61	*24*
Not sure	1	*6*	20	*12*	3	*13*	5	*26*	2	*8*	31	*12*
Total	18	*101*	173	*100*	23	*100*	19	*99*	24	*100*	257	*100*

Sufficiency of information, advice, and preparation in 2000

In 2000, with hindsight, the majority of respondents (217; 68%) still thought that they had been given enough information, advice, and preparation for their "life after school". But a substantial proportion, almost one-third (95; 30%), did not think this was the case.

In contrast to 1999, respondents' views in 2000 were significantly different according to their age and last year of schooling. Respondents whose last year at school was year 13 (180; 73%) were more likely to think that they had enough information, advice, and preparation than respondents whose last year was 11, 12, or 14 (37; 52%).

The pattern for the equivalent age groups was much the same. Table 31 shows respondents' views by their last year of schooling.

Table 31: Sufficiency of Information, Advice, and Preparation in 2000 by Last Year of Schooling (N=317)

	Year 11		Year 12		Year 13		Year 14		Total	
	N	%	N	%	N	%	N	%	N	%
Yes – mostly	-	-	15	45	153	62	14	50	182	57
Yes – partly	1	11	2	6	27	11	4	14	34	11
No	7	78	15	45	63	26	10	36	95	30
Not sure	1	11	1	3	4	2	-	-	6	2
Total	9	100	33	99	247	101	28	100	317	100

These data indicate that careers information at these schools is focused mainly on year 13 students, and that many students in other years, who are not in this "majority group", are not getting as much information as they would like. Some respondents commented that their school career service was good for those who intended to go to university, but it did not provide much assistance for those who wanted to work or do a lower level course.

Table 32 shows respondents' views by ethnicity. Interestingly, although the numbers were too small to be significant, the views of Maori respondents had changed since 1999. In 1999, the Maori group had the smallest proportion indicating that they did not have enough information (3; 17%). In 2000 this position was reversed, so that Maori had the largest proportion indicating this (12; 44%), compared with the other ethnic groups (83; 29%). These data indicate that, with hindsight, Maori respondents identified gaps in career information provision at their school that they were not aware of when they were at school.

Table 32: Sufficiency of Information, Advice, and Preparation in 2000 by Ethnicity (N=318)

	Maori		European		Pacific		Asian		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Yes – mostly	13	48	127	59	17	52	12	57	14	61	183	57
Yes – partly	1	4	22	10	6	18	2	10	3	13	34	11
No	12	44	61	29	9	27	7	33	6	26	95	30
Not sure	1	4	4	2	1	3	-	-	-	-	6	2
Total	27	100	214	100	33	100	21	100	23	100	318	100

Other information, advice, or preparation needed

A substantial proportion of these young people (129; 40%) provided suggestions about types of information or preparation they would have liked to receive (but did not receive) to help them make transition decisions. Respondents' replies to this question were coded into a number of categories. Most frequently mentioned, by those who made comments, were suggestions grouped as "More career planning" (54; 42%); for example, starting career planning at school at an earlier age, providing information about what subjects to

take to lead to their desired career, or providing information about the jobs that different courses led to. Also suggested were:

- Information on range of courses and locations available (40; 31%)
- Information on content of individual courses (31; 24%)
- Information about university life and requirements (18; 14%)
- Knowledge about where to access information (15; 12%)
- Work experiences organised by school (14; 11%)
- Talks from visitors about decisions they made or courses they did (14; 11%)
- Preparation concerning how to get jobs (13; 10%).

The suggestions of those Maori respondents who indicated that they did not have enough information were examined to see if their identification of sources they required showed a different pattern from the suggestions of other respondents. This was not the case. Like responses from other groups, responses to this question by Maori most commonly came into the category of "More career planning".

Responses by females also fell most commonly into the "More career planning" category, whereas responses by males fell into "More information on the range of courses and locations". Unlike their counterparts from other ethnic groups, Asian respondents were mostly concerned with "More information on the range of courses and locations". The most common category of responses to this question by those from the lower decile schools was "More career planning", whereas for those from the two decile 9 schools, it was "More information on the range of courses and locations". As previously mentioned in the section on *Information Sources (pp. 31-38)*, respondents from the three lower decile schools tended to use the school careers information service more than other sources of information. This probably related to their desire for more career planning.

Looking back

Would respondents have made the same decisions again?

In 2000, respondents were asked, "Looking back, if you were in 1999 again, would you have made the same study or career decisions?" Most respondents (213; 66%), thought that they would have made all of the same decisions again, and a little over one in ten (39; 12%) thought that they would have made some of the same decisions; but just under one in five (62; 19%) thought that they would not have made the same decisions.

The 101 respondents who would have changed some or all of their decisions were asked what they would have done differently. Respondents' answers were coded into categories. The most common answer to this question, given by 37 (37%) of those who answered the question, was that they would have "studied harder or stayed at school". Other changes that those who answered this question would have made included:

- Taking different or only enjoyable subjects (28; 28%)
- Taking a different course altogether (19; 19%)
- Looking around more at different courses or got more information (11; 11%)
- Taking school subjects related to their career (7; 7%)
- Having a break from study (7; 7%)

- Doing a different job (5; 5%)
- Other (5; 5%).

The reasons given for wanting to have made these changes were related to the career consequences; for example, those who would have studied harder noted that this would have prepared them better for their current activities, or would have provided them with more career options.

Variation in sufficiency of information, advice, and preparation

The adequacy of the information, advice, and preparation that respondents had was related to their ability to make good decisions. Respondents who felt that they did not have enough information or advice to be prepared for "life after school", or felt that they only had some of the information or advice they needed, were more likely to say that they would have made different decisions.

There was very little variation in whether respondents would have made the same decisions again by gender, ethnicity, decile, or last year of schooling, but there were variations by age. Younger respondents (aged 15 or 16 in 1999) were more likely to say that they would not have made the same decisions again. These data seem to be related to the broader trend for younger respondents to be less sure of where they were going, to feel that they did not have enough information, advice, or preparation to make decisions, and consequently to feel that they had not made the best decisions for themselves.

Did post-secondary plans influence the selection of school subjects?

In 1999, students were asked whether their ideas on what they might do when they left school had influenced their choice of the school subjects they were taking at the time of the survey. Of the 281 students who answered this question, over half (155; 55%) responded "yes". The only significant difference by variable was that Asian students and European students were more likely to respond "yes" to this question, while Maori students were less likely to do so. Students who left school after year 11 or 12 were more likely to respond "no" or "not sure". Interestingly, many students did not see a correlation between the subjects they studied at school and their future tertiary study or career options, indicating why a number of students suggested that they required more career planning assistance.

Looking forward

Plans for the future

At the end of the Phase 2 interviews, respondents were asked about their plans for the next few years. Most had general plans about what they wanted to do in the future with regard to study, work, and overseas travel. Respondents' replies were organised into the same areas used to categorise their intentions (Table 33).

Over four-fifths of respondents intended to study in the near future. Just over half planned to continue with all or most of their current course of study, approximately one-tenth planned to change their course of study, and approximately one-quarter were going

to find a course to do. Just over half were going to work to earn money to study, and approximately one-third planned to work in a career-related job, either immediately or in the near future. Almost a third planned to travel overseas at some stage, and this was the sole plan for four respondents. Only four were totally unsure of their immediate plans.

Table 33: Plans for the Future (N=321)

Plans	N	*%*
Study and work	190	*59*
Study only	90	*28*
Work only	33	*10*
Travel only	4	*1*
Don't know	4	*1*
Total	321	*99*

Concluding comments

At the end of the Phase 2 interview respondents were asked if they had any other comments to make about their career choices and the information or advice that had helped them to make these choices. The most common replies to this question, given by 27 respondents (8%), concerned the helpfulness of the careers services and teachers at their secondary school. Comments about one particular career counsellor stood out from the others. Respondents variously described how this counsellor held individual career interviews with students. During a dialogue in which the student and the counsellor had a realistic discussion about the student's abilities and skills, the counsellor looked at the subjects the student was studying, and encouraged the student to continue studying these subjects if the student enjoyed them. He then matched the student's skills to jobs using a computer program. From this matching, he presented the student with a range of information on tertiary courses that would lead to later employment related to their skills and interests. He also assisted students with enrolment forms. These young people commented that the counsellor was "more like a friend than a teacher", he "always had his door open", and he "discussed what you wanted to do". One respondent reported that she had first visited this counsellor in Form 3, and he had helped her select her school subjects all the way through secondary school.

It is likely that this type of assistance would be particularly beneficial for students from lower decile schools, whose families are less likely to be familiar with the process of selecting courses of study and the enrolment requirements for these courses. They would also be of benefit to other groups of students identified in this study. As already noted, respondents from the lower decile schools used the school careers service and teachers as information sources more than their counterparts at the two decile 9 schools.

SUMMARY AND DISCUSSION

The most common pattern of intentions and actual activities for the students in this study was to leave school after year 13 with an A or B Bursary, and study for a degree at a university, while working part-time or casually. This study was to be undertaken as a stepping stone towards a professional or technical career.

In 1999, almost half of the students were unsure of their career aspirations. By 2000, approximately two-thirds had a firmer idea of where they were headed career-wise. Their year of "hands-on" study and work experiences in 2000 had given them the direct experience from which to make further career plans and decisions.

The link between firm qualification and career aspirations, and tertiary study

Students in the majority group in this study, that is, European students who had left school at the end of year 13, when they were aged 17 or 18, and had attended decile 9 schools, seemed to have a firmer picture of what they were doing and where they were heading. This was not the case for many students in other groups. For example, in 2000, Maori and Pacific students tended not to have realised their aspirations to continue on to tertiary study, or to be studying at non-mainstream tertiary providers. Students from lower decile schools were less likely to be engaged in tertiary study than those from higher decile schools. Younger students (aged 15 or 16 when they intended to leave school) tended to have changed their plans more when compared with their older counterparts.

Students who were unsure of their plans in 1999 tended to be working or completing non-degree qualifications in 2000, whereas their counterparts who were more sure of their plans tended to be studying for degree qualifications. So having a firm plan before leaving school was one of the factors that led to participation in tertiary study for the students in this study. Similar findings have been reported in other studies, as described in the introduction to this report. A close association between students' intentions and subsequent actions was found by Maani (2000), and Conti (2000) found a link between educational aspirations and successful further study.

It appears likely that the career programmes of the five schools in this NZCER study were mostly focused on assisting year 13 students to attend university. One outcome of such a focus could be that students in other age groups miss out on careers guidance. These other students are likely to need more assistance, as they have lower qualifications when they leave school, and therefore fewer opportunities. Younger students are one of the "at risk" groups in this study, that is, "at risk" of "leaving school unprepared for the transition to the workplace or further education/training" (Ministry of Education, 1999, p.25). They seemed to require more assistance to continue with secondary education, firm their transition plans, and therefore participate in tertiary study. The 2000 report by the Organisation for Economic Co-operation and Development (OECD) suggests that effective transition systems need to have flexible pathways and "tightly knit safety nets

for those at risk" (OECD, 2000, p.150), for example, a broad range of vocational programmes at senior secondary school level, or individual programmes for students at risk of dropping out of school.

Differences between intentions and actions

Students' actions in 2000 differed from their intentions in 1999 in a number of ways. In 1999, the majority of those planning to study intended to enrol in degree programmes; but in 2000, many more than intended were completing diplomas, other programmes, or Youth Training and TOPs. In 2000, too, more than intended were studying at "other" tertiary institutions, such as PTEs. While the majority had intended to combine work and study, fewer than intended managed to do so, particularly Maori and Pacific students and those from lower decile schools.

Patterns by school decile

This study included only five schools: two low decile schools, one mid-decile school, and two high decile schools. These data therefore show a "school effect", but trends by decile are also evident. On the whole, students from the lower decile schools were less likely to participate in tertiary study than their high decile counterparts. Students at the two lowest decile schools were more likely to go to polytechnics, while students from the two high decile schools were more likely to study for a degree at university. Lower decile students were less sure of what area they would study in.

School decile is strongly related to SES. As the data in this study show, students from low SES backgrounds are less likely to participate in tertiary education or attend university. These findings are reported in many other studies (Haveman & Wolfe, 1995; Lauder & Hughes, 1990; Fergusson & Woodward, 2000; Parr & Parr, 1995; Long, Carpenter, & Hyden, 1999).

However, larger proportions of the lower decile students had an idea of the career they were working towards, compared with decile 9 students. This is likely to be due to the more vocationally-based training they were undertaking.

Students at the lower decile schools tended to use "school-based" or "tertiary-based" information sources external to their home environment, whereas high decile students tended to use "personal-based" sources, such as family and friends.

Patterns by ethnicity

These data show a general pattern of lower participation in tertiary study by Maori students. Although the sample size was small, the data from this study are indicative of a possible wider trend for Maori students to be "at risk" of leaving school unprepared career-wise. The Maori students in this study tended to leave school earlier and be less sure of their intended destinations. They had lower rates of participation in tertiary study, higher rates of attrition from tertiary study in the first year out of school, and lower rates of satisfaction with the information sources required to make decisions.

There is some evidence to suggest that, with hindsight, the Maori students in this study had identified gaps in the information and preparation they were given to assist

their post-secondary transition decision-making. Given these indications, it seems that a re-focusing on career programmes, targeting younger Maori students with a range of programmes and information sources, would be beneficial.

Pacific students also tended not to realise their aspirations to continue on to tertiary study, or were studying at non-mainstream tertiary providers.

Patterns by age and last year of schooling

Students who were in year 13 (aged 17 or 18) when they planned to leave secondary school had firmer transition plans than the other students in this study. They also were more likely to act on their plans. In 2000, most of the students who had left school after year 13 were, as they had planned in 1999, studying at universities and polytechnics.

Younger students' experiences of post-secondary transition were substantially different from those of students who left school after year 13. In 1999, younger students tended to be unsure of their plans. As they had left school earlier with lower qualifications, they were more likely to go into non-mainstream tertiary study options or work than their counterparts who had stayed at school longer. Younger students were also more inclined to report that they did not have sufficient information, advice, or preparation to assist their transition decisions. This finding accords with the results of an analysis of 100 ERO school reports (Education Review Office, 1999), where one of the most commonly reported issues in schools' provision was the failure to deliver career information and guidance at all year levels. The year level most frequently omitted was year 9.

Patterns by gender

Most of the findings in this study show very little variation by gender. This indicates that student ethnicity, school decile, student age, and student year level at leaving school, are the factors that are more important to consider in planning programmes.

The only aspects showing variation by gender were the subject areas that students chose to study, and their career motivations. Gender differences in study area preferences and choices are reported in other studies, as described earlier in this report (Rivers, Lynch, & Irving, 1989; Pratt, 1999).

Patterns in the use of information

"Family members and relatives" was the information source used by the largest proportion of students. The influence of family members and whanau on students' career and transition decisions is reported in other studies (Wilson & Young, 1998; Hodkinson, 1996; Parr & Parr, 1995; Ainley & Sheret, 1993; Rivers, Lynch, & Irving, 1989; Paa & McWhirter, 2000).

Although family and whanau was the information source *used* by the largest proportion of students, when the sources were ranked as a percentage of those who had used them, those that rated as the *most useful* in assisting transitions decisions were mostly "employment-, school-, or tertiary-based"; for example, organised contact with people in the industries they intended to work in, the careers information service at their

secondary school, liaison officers, and the brochures and handbooks put out by universities and polytechnics. "Family members and relatives" was the only "personal-based" information source to be rated in the 10 most useful information sources.

With the exception of handbooks put out by universities and polytechnics, most of the information sources these young people preferred involved personal contact or "hands-on" interaction and direct experience. This preference was also reported in Wilson and Young (1998), and in the OECD (2000) report on the transition policies and programmes of 14 countries. The OECD report concluded that "widespread opportunities to combine workplace experience with education" (OECD, 2000, p.150) was one of the key features that appeared to be central to an effective transition programme.

For the students in this study, adequate information, advice, and preparation were directly related to their ability to make good decisions. Students who did not have enough information, advice, or preparation were more likely to say that they would have made different decisions if they were able to have the year again.

Most students felt that they did have sufficient information, advice, and preparation to help them decide what to do on leaving school. A similar level of satisfaction with access to information was reported by Wilson and Young (1998) who noted that approximately four-fifths of their sample of students felt that their school had provided adequate information to assist them to plan their careers. However, many of the students in this study also provided suggestions about areas that would have been of further assistance to them. The most popular suggestion fell into the category of "more career planning", for example, starting career planning at a younger age.

While it seems that the students had set post-secondary study goals with some confidence, in terms of deciding to study and which type of institution to study at, fewer students knew the name of the qualification they would study for, and fewer still knew their intended career or job title.

It could be beneficial for New Zealand students to have greater and more effective access to career advice and counselling, especially individual career planning, from schools, tertiary institutions, and government agencies. There may also be some benefit in parent education, given that family members were found to be an important influence in the students' decision-making regarding their "life after school".

Recommendations

- Personal attention provided by a career interview would benefit younger students, especially those at lower decile schools.

  In this study, the major gap identified by the students in the provision of information, advice, and preparation for "life after school" was career planning. These young people suggested that they could benefit from personal career planning, starting at an earlier stage in their schooling, which emphasised how the school subjects they were studying could lead to the careers they desired. Developing individual programmes was identified by the OECD (2000) as one way of assisting "at risk" students. This need to develop further programmes for younger students was also identified by Wilson and Young (1998), who reported that in general, in the schools they surveyed, the type of career advice received by

year 12 students was likely to be focused on generic skills such as CV writing, and that individual career interviews did not occur until year 13. Only some of the year 9 students, in about 50 percent of the schools they surveyed, had an individual interview with a career counsellor. Students in this study indicated a need for school careers services to provide information on a wider range of options, for example, to reduce the current emphasis on university as the sole further study option. This could be provided through, for example, publications such as *Courses Galore 2000-2001* (Career Services Rapuara, 2000), websites such as the Career Services KiwiCareers site (http://www.kiwicareers.govt.nz/), telephone services such as the CareerPoint freephone career information and advice service (ph 0800 222 733), or attendance at the annual Careers Expo (http://www.careers-expo.co.nz/).

- Students who do not have plans could be a focus for career programmes or individual career interviews to ensure that they leave school with at least a starter plan for the next year.

  Students who were undecided about their plans when they left school could be regarded as an "at risk" group, as in this study they did not continue on to tertiary study in the same proportions as students who had plans. One example of a stronger focus on these students could be through providing exit career interviews to all school leavers in year 11, 12, and 14, to help them focus on identifying a set of transition plans.

- Career information guidance programmes need to specifically target Maori and Pacific students, and students from the lower decile schools, to ensure that they have adequate information, advice, and preparation.

  This study identified gaps in the information, advice, and preparation provided to these students.

- "Personal" and "hands-on" career information and guidance should be considered a priority in any information gathering exercise.

  Students in this study preferred "personal" and "hands-on" information sources rather than "impersonal" ones. The students seemed to prefer interactions with career professionals rather than telephone services, videos, or websites as their preferred information dissemination resource.

- Activities that identify students' interests, strengths, and skills should be an earlier and continuous priority of career information and guidance programmes.

  In this study, students' personal interests were found to be the main motivator behind their career decisions. This suggests that career programmes that help individual students to identify and refine their areas of interest, the skills they have that are related to their interest area, and the possible further study and employment opportunities that could stem from this interest, are likely to assist students in their post-secondary transition.

The publication *Career Information and Guidance in New Zealand Schools* states that:

> Currently, career information and guidance activities offered by schools fall into three broad categories:
>
> - activities aimed at increasing students' awareness of the careers options open to them;
> - activities aimed at assisting students to gain employment after leaving school;
> - activities aimed at providing students with accurate information about their options for tertiary study. (Ministry of Education, 1997b, p.14)

These statements seem to imply that activities that identify students' interests, strengths, and skills have already occurred – but this does not necessarily seem to be the case.

- Family, relatives, family friends, and peers were major sources of information for the young people in this study and other reported studies.

  This reliance on "home-based" information sources proved problematic for some students, who found that, with hindsight, these sources were not necessarily as useful as others. It is possible that family and friends have been reported frequently as information sources used by students in the absence of easily accessible alternatives; therefore any career programme should recognise this situation and make a greater range of current, relevant information sources readily available to all students to assist their decision-making. Although parents seem to have a substantial input into their children's career decisions, Wilson and Young (1998) note that only a small number of schools directly involve parents as one of their main career resources, through options evenings, work experience placements, or PACE programmes. In many schools, parents' skills could be further utilised as guest speakers, mentors, or role models. Programmes such as PACE could be used as a way of supporting parents to provide more useful information, and to provide more information to "at risk" students, such as those at lower decile schools, and Maori and Pacific students.

Areas for further research

A number of gaps in the research have been identified by this study. One is in the career information and guidance experiences of students in lower decile schools and Maori and Pacific students. Research is needed to extend the recent work of Skill New Zealand (2000) by further identifying the elements of "good practice" careers information and guidance for these students, in the wider context of the school.

This research could include an examination of: schools from which a larger proportion of students than normal continued on to tertiary education; the types of career programmes at the schools across age levels and other groups; how the schools and teachers help students to develop aspirations to continue on to tertiary study; and the information sources available to students and how they are presented. Another avenue for

exploration could be an action research project that would result in the development of further effective career guidance programmes for "at risk" students.

REFERENCES

Apter, T. (2001). Age of growing concerns. *The Times Higher Educational Supplement*, 13 April, p.19.

Ainley, J., & Sheret, M. (1993). Beyond the compulsory school years: Transitions in New South Wales high schools. *Australian Journal of Career Development*, June, pp.15-22.

Bloor, D., & Brook, J. (1993). Career development of students pursuing higher education. *New Zealand Journal of Educational Studies*, 28 (1), pp.57-68.

Career Services Rapuara (2000). *Courses galore 2000-2001*. Wellington: Career Services 2000.

Conti, R. (2000). College goals: Do self-determined and carefully considered goals predict intrinsic motivation, academic performance, and adjustment during the first semester? *Social Psychology of Education*, 4, pp.189-211.

Department of Statistics (1999). New Zealand standard classification of occupations (1999) at: http://www.stats.govt.nz/domino/external/web/carsweb.nsf/94772cd5918085044c2567e6007eec2c/ef7c87fcece9546ccc2568c40000836e/$FILE/ATTMJ412/NZSCOall.txt

Education Review Office (1998). *The senior secondary student*. Wellington: Education Review Office.

Education Review Office (1999). *Career information and guidance in schools with secondary students*. Wellington: Education Review Office.

Fergusson, D., & Woodward, L. (2000). Family socioeconomic status at birth and rates of university participation. *New Zealand Journal of Educational Studies*, 35 (1), pp.25-36.

Furedi, F. (2001). You'll always be my baby. *The Times Higher Educational Supplement*, 23 March, p.19.

Haveman, R., & Wolfe, B. (1995). The determinants of children's attainments: a review of methods and findings. *Journal of Economic Literature*, 33, pp.1829-1878.

Hodkinson, P. (1996). How young people make decisions. ***set:*** *Research Information for Teachers*, 2, item 10.

Julien, H. (1999). Barriers to adolescents' information seeking for career decision-making. *Journal of the American Society for Information Science*, 50 (1), pp.38-48.

Khan, S., & Alvi, S. (1983). Educational, social, and psychological correlates of vocational maturity. *Journal of Vocational Behavior*, 22, pp.357-364.

Lam, S., & Ball, K. (1999). *Curriculum and careers: The education and labour market consequences of year 12 subject choice*. Longitudinal Surveys of Australian Youth Research Report No. 12. Camberwell, Victoria: Australian Council for Educational Research.

Lauder, H., & Hughes, D. (1990). Social origins, destinations and educational inequality. In J. Codd, R. Harker, & R. Nash. (eds.), *Political issues in New Zealand education*. Palmerston North: Dunmore Press, pp.43-60.

Lauder, H., Hughes, D., Dupuis, A., & McGlinn, J. (1992). *To be somebody: class, gender and the rationality of educational decision-making.* Final report in fulfilment of contract number 41/17/137 between the Department of Education and the University of Canterbury. Wellington: Department of Education.

Long, M., Carpenter, P., & Hayden, M. (1999). *Participation in education and training 1980-1994.* Longitudinal Surveys of Australian Youth Research Report No.13. Camberwell, Victoria: Australian Council for Educational Research.

Maani, S. (2000). School leaving, labour supply and tertiary education choices of young adults: an economic analysis utilising the 1977-1995 Christchurch health and development surveys. Treasury Working Paper 00/3 at: http://www.treasury.govt.nz/workingpapers/2000/00-3.asp

McCord, J. (2000). When parental power becomes overbearing. *The Times Higher Educational Supplement*, 8 December, pp.7-8.

Ministry of Education (1997a). *Ministry of Education socio-economic indicator for schools.* Wellington: Data Management and Analysis Section, Ministry of Education.

Ministry of Education (1997b). *Career information and guidance in New Zealand schools.* Wellington: Ministry of Education/Learning Media.

Ministry of Education (1999). Notices. *New Zealand Education Gazette*, 78 (12), p.25.

Nash, R. (1993). *Succeeding generations: Family resources and access to education in New Zealand.* Melbourne: Oxford University Press.

Oakes, L., von Dadelszen , J., & Barker, P. (2001). New Zealand Country Paper. Paper presented at the International Symposium on Career Development and Public Policy, Vancouver, March 5-6.

OECD (2000). *From initial education to working life: Making transitions work.* Paris: OECD.

Paa, H., & McWhirter, E. (2000). Perceived influences on high school students' current career expectations. *Career Development Quarterly*, 49, pp.29-44.

Parr, B., & Parr, J. (1995). *The tertiary education participation study: An investigation of the plans of seventh formers and their outcomes.* Auckland: Auckland Uniservices Limited.

Pratt, A. (1999). *Gender differences in achievement and participation in the compulsory school sector: A review of information held by the Ministry of Education 1986-1997.* Wellington: Ministry of Education.

Reich, W., & Earls, F. (1990). Interviewing adolescents by telephone: is it a useful methodological strategy? *Comprehensive Psychiatry*, 31 (3), pp.211-215.

Rivers, M., Lynch, J., & Irving, J. (1989). *Project FAST: Report of a national pilot study of future aspirations, subjects, and training of senior secondary school student.* Wellington: Department of Education.

Skill New Zealand (2000). *Pathways to independence: Effective youth transitions.* Wellington: Skill New Zealand.

Wilson, A., & Young, L. (1998). *Implementation of the career information and guidance policy in schools: 1998 follow-up study.* Report to the Ministry of Education. Dunedin: University Consulting Group, University of Otago.

APPENDIX A
Phase 1 Demographic Information

Initial sample for phase 1

The total dataset for phase 1 comprised 1,912 students from five secondary schools, as shown in Table 34.

Table 34

Sample Description (N=1912)

Item	N	%
Decile		
2	382	20
3	235	12
4	315	17
9	497	26
9	483	25
Gender		
Female	1081	57
Male	831	44
Age (1 missing)		
15	498	26
16	657	34
17	515	27
18	195	10
19 and over	46	2
Year (6 missing)		
11	804	42
12	614	32
13	430	23
13/14	58	3
Ethnic group (5 missing)		
Maori	207	11
European/Pakeha	943	49
Pacific Island	347	18
Asian	213	11
Other	197	10

Intention to return to school

Two-thirds of the students indicated they were returning to secondary school next year.

School decile

As shown in Table 35 below, the students from the decile 2 school were the most likely to indicate that they would return to school. Students at the decile 2 and 3 schools were more likely to indicate that they did not know if they would be returning to school next year compared with the students from the other schools.

Table 35

Intention to Return to School Next year by School Decile (N=1912)

	Yes		No		Don't Know	
Decile	N	%	N	%	N	%
2	271	*71*	51	*13*	60	*17*
3	131	*56*	64	*27*	40	*17*
4	199	*63*	90	*29*	26	*8*
9	646	*66*	272	28	62	*6*
Total	1247	*65*	477	25	188	*10*

Gender

Females were more likely than males to say that they would not be returning to school next year as shown in Table 36. When the "No" and "Don't Know" categories were combined, there were no significant differences by gender in students' intentions to return to school.

Table 36

Intention To Return to School Next year by Gender (n=1912)

	Yes		No		Don't Know	
Gender	N	%	N	%	N	%
Female	687	*64*	305	*28*	89	*8*
Male	560	*67*	172	*21*	99	*12*
Total	1247	*65*	477	*25*	188	*10*

Age and school year level

As expected, age (Table 37) and school year level (Table 38) were the clearest indicator of whether students intended to return to school next year. Most students under 17 intended to return to school, whil most students who were older than 17 did not. Seventeen-year-olds themselves were evenly divided, but an age by school-year-level cross-tabulation showed that this age group is evenly divided between year 1 and year 13 (235 and 241, respectively). Most year 11 and year 12 students intended to return, while mos students in year 13 and 13/14 did not intend returning to school.

Table 37

Intention To Return to School Next Year by Age (n=1911)

	Yes		No		Don't Know	
Age	N	*%*	N	*%*	N	*%*
15	439	*88*	12	*2*	47	*9*
16	546	*83*	46	*7*	65	*10*
17	215	*42*	250	*49*	50	*10*
18	34	*17*	141	*72*	20	*10*
19 and over	12	*26*	28	*61*	6	*13*
Total	1246	*65*	477	*25*	188	*10*

Table 38

Intention To Return to School Next Year by School Year Level (n=1906)

	Yes		No		Don't Know	
Year	N	*%*	N	*%*	N	*%*
11	707	*88*	24	*3*	73	*9*
12	477	*78*	66	*11*	71	*12*
13	44	*10*	348	*81*	38	*9*
13/14	13	*22*	39	*67*	6	*10*
Total	1241	*65*	477	*25*	188	*10*

Ethnicity

Significantly more Maori and Pacific students indicated that they did not know whether they would return to school the next year. Relatively fewer Maori also indicated that they would return as shown by Table 39.

Table 39

Intention To Return to School Next Year by Ethnicity (n=1907)

	Yes		No		Don't Know	
Ethnicity	N	*%*	N	*%*	N	*%*
Maori	12	*60*	46	*22*	37	*18*
European	608	*65*	272	*29*	63	*7*
Pacific	231	*67*	67	*19*	49	*14*
Asian	145	*68*	46	*22*	22	*10*
Other	135	*69*	46	*23*	16	*8*
Total	1243	*65*	477	*25*	187	*108*

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APPENDIX B
Phase 1 Questionnaire

POST-SECONDARY TRANSITION RESEARCH PROJECT: FIRST STUDENT QUESTIONNAI

Name of school: _____

Student's name: _____

Home address: _____

_____

Home phone number: _____

1. Are you male or female?

   ☐ a) Female ☐ b) Male

2. What is you age now?

   ☐ a) 15 years ☐ b) 16 years ☐ c) 17 years

   ☐ d) 18 years ☐ e) 19 years ☐ f) Over 19 years

3. What year of schooling are you in this year?

   ☐ a) Year 11 ☐ b) Year 12 ☐ c) Year 13

   ☐ d) Year 13 second year/year 14

4. Which ethnic group/s do you belong to?

   ☐ a) Maori ☐ b) European/pakeha ☐ c) Pacific Island

   ☐ d) Asian ☐ e) Other—please describe _____

5. Are you going back to school next year?

   ☐ a) Yes → No more questions. Thank you for your time

   ☐ b) Don't know → No more questions. Thank you for your time

   ☐ c) No → Please go to q.6

6. If you are not going back to school, please tell us what you will probably do next year:
TICK ALL BOXES WHICH APPLY TO YOU

❒ a) Go overseas → No more questions. Thank you for your time

❒ b) Study for a degree at a N.Z. university or polytechnic

❒ c) Study for a different qualification (e.g., a diploma) in N.Z.

❒ d) TOPS course

❒ e) Study and work at same time

❒ f) Other—please describe

❒ h) Don't know yet → Please go to q.14

7. If you intend getting work next year, will you be looking for:

❒ a) Full-time work ❒ b) Part-time work ❒ c) Don't know

8. If you intend studying for a degree or another qualification next year, will you be studying:

❒ a) Full-time ❒ b) Part-time ❒ c) Don't know

9. If you intend studying either full or part-time next year, please give the name of the qualification you intend studying for, and the name of the institution where you intend to study (e.g. B.A., University of Auckland). If you don't know either of these put Don't know" in the space provided:

❒ a) Name of qualification: _____

❒ b) Name of university, polytechnic
or other training provider: _____

10. If you know what career or job title you will probably take up either next year or when you finish studying, please write this below. If you don't know put Don't know" in the space provided:

_____

11. If you know what you are likely to be doing next year, which of the following sources of information helped you decide?

TICK ALL BOXES WHICH APPLY TO YOU

- ☐ a) Family members/relatives
- ☐ b) Family friends
- ☐ c) Peers/own age group friends
- ☐ d) Careers information service at school
- ☐ e) School teacher/s
- ☐ f) STAR or LINK course at school
- ☐ g) Careers Expo
- ☐ h) University/polytechnic liaison officer/s
- ☐ i) Brochures/pamphlets or handbooks put out by universities or polytechnics
- ☐ j) Work experience
- ☐ k) Print media (newspapers, magazines, books)
- ☐ l) Television
- ☐ m) Radio
- ☐ n) Internet websites
- ☐ o) Other, please describe_____

12. If you know what you are likely to be doing next year, do you feel you had enough information to help you decide?

- ☐ a) Yes → Please go to q.15
- ☐ b) No
- ☐ c) Not sure

13. Thinking back to when you decided what to do next year, which, if any, of the following sources of information would you have liked to have had then to help you decide?

TICK ALL BOXES WHICH APPLY TO YOU

- ☐ a) Family members/relatives
- ☐ b) Family friends
- ☐ c) Peers/own age group friends
- ☐ d) Careers information service at school
- ☐ e) School teacher/s
- ☐ f) STAR or LINK course at school
- ☐ g) Careers Expo
- ☐ h) University/polytechnic liaison officer/s
- ☐ i) Brochures/pamphlets or handbooks put out by universities or polytechnics
- ☐ j) Work experience
- ☐ k) Print media (newspapers, magazines, books)
- ☐ l) Television
- ☐ m) Radio
- ☐ n) Internet websites
- ☐ o) Other, please describe_____

Now go to question 15

14. If you don't know yet what you are likely to be doing next year, which of the following sources of information would you like to have to help you decide?

TICK ALL THE BOXES WHICH APPLY TO YOU

- ☐ a) Family members/relatives
- ☐ b) Family friends
- ☐ c) Peers/own age group friends
- ☐ d) Careers information service at school
- ☐ e) School teacher/s
- ☐ f) STAR or LINK course at school
- ☐ g) Careers Expo
- ☐ h) University/polytechnic liaison officer/s
- ☐ i) Brochures/pamphlets or handbooks put out by universities or polytechnics
- ☐ j) Work experience
- ☐ k) Print media (newspapers, magazines, books)
- ☐ l) Television
- ☐ m) Radio
- ☐ n) Internet websites
- ☐ o) Other, please describe _____

15. When you chose your school subjects for this year (1999), did your ideas on what you might do when you leave school influence your choice of subjects?

- ☐ a) Yes
- ☐ b) No
- ☐ c) Not sure

16. If you answered yes to question 15, please list your 1999 school subjects and your ideas for your future.

17. Is there anything else you want to tell us, or other comments you would like to make?
If so, please write this below:

Thank you for your time and thoughts.

APPENDIX C
Phase 1 Parent Introductory Letter and Consent Form

Post-secondary transition project: Information for parents/guardians/caregivers

I want to tell you about the research that the New Zealand Council for Educational Research (NZCER) is doing on post-secondary transition. The council is undertaking an independent study of the destinations of secondary school leavers, including students who get approval to leave school early and students in years 11, 12 and 13. The aim is not to single out any group of students, but to find out where students go when they leave school -universities, colleges of education and other tertiary, further training such as training opportunities programme, job market or overseas. The study will also examine what help is available to assist those students who enter the job market. This independent study is part of the work programme of NZCER, funded through an agreement with the Ministry of Education for provision of services.

Participation in the study is voluntary, but your assistance will greatly enhance the information we collect, analyse and report.

There are two important phases in the study that I wish to draw your attention. We would like the students to complete a short questionnaire to inform us of what they are thinking of doing or rather what they would like to do when they leave school. We would like to follow this up with a survey of where they actually move to three to six months after they leave school.

Anything you tell us will be treated as confidential and used only for the purpose of the study. Your names will not be used at any stage during the research, or in any subsequent research reports and no respondent will be identified with any response or information. The data collected will be stored at the offices of the NZCER and will be subjected to the security and disposal guidelines of the Council. NZCER undertakes research in a very professional manner, and is highly regarded among educational research communities in New Zealand and overseas. You can be assured that the information you provide will be used appropriately. I understand that the student and I can withdraw our consent to participate at any time, and that I can also inspect and change my responses. A summary of the main findings will be available for parents and participating schools on request.

Thank you for your help. <u>You do not have to do anything if you are happy for your student to participate</u>. If you do not want your student to participate, please complete the slip at the back and return to us using "freepost no. 3214". If you have any questions or concerns please contact Dr David Yeboah on (04) 802 1643.

Post-secondary transition project: Consent form for parents, guardians and caregivers

I have read the information sheet on the post-secondary transition study. I am the parent/guardian of .....

I do not give permission for him/her to participate in the study and I am confirming this by returning the slip below.

Return this slip only if you do not want your student to participate in the study. (PLEASE USE FREEPOST No. 3214)

NAME of Student ----------

NAME OF PARENT----------

SIGNATURE OF PARENT/GUARDIAN ---------- -------
DATE _____

Please complete, detach and return this form to the address below:

Freepost No. 3214
Dr David Yeboah
Senior Researcher
NZCER
P O Box 3237
WELLINGTON
Phone: (04) 802 1463

APPENDIX D
Phase 1 Student Introductory Letter and Consent Form

Post-secondary transition project: Information for students

I want to tell you about the research that the New Zealand Council for Educational Research (NZCER) is doing on post-secondary transition. We are undertaking an independent study of where secondary school leavers go when they leave school. This includes students who get approval to leave school early and those in years 11, 12 and 13. Out aim is not to single out any group of students, but to find out where students go – e.g. universities, colleges of education and other tertiary, further training such as training opportunities programme, job market or overseas. We will also examine what help is available to assist students who want to work. This independent study is part of the work programme of NZCER, funded through an agreement with the Ministry of Education for provision of services.

Participation in the study is voluntary, but your involvement will greatly improve the information we collect, analyse and report. You will also be contributing significantly to increasing our knowledge and understanding of what students do when they leave school.

There are two important phases in the study that I wish to draw your attention and ask for your help. We would like you to complete a short questionnaire to inform us of what you are thinking of doing or rather what you would like to do when you leave school. We would like to follow this up with a short telephone survey of where you actually move to three to six months after you leave school. During the second phase, we may also collect information from your parents or guardians, and your teachers on what you are doing after leaving school.

Anything you tell us will be used only for this study. Your names will not be used at any stage during the study, or in any reports that the study produces. No one will be identified through any response or information given. The data will be stored at the offices of the NZCER and will be subjected to the security and disposal guidelines of the Council. NZCER undertakes research in a very professional manner, and is highly regarded among educational research communities in New Zealand and overseas. You can be assured that the information you provide will be used appropriately.

Please proceed to complete the questionnaire given to you by the Principal or Deputy Principal if you are happy to be involved in the study.

Thank you for your help. If you do not want to be involved in the study, please complete the form at the back and return to the Principal or Deputy Principal. Do not complete the questionnaire if you do not want to be involved in the study.

Post-secondary transition project: Consent form for students

I have read the information sheet on the post-secondary transition study.

I do not want to participate in the study and I am confirming this by returning the slip below to the School Principal.

Return this slip **only if** you do not want to participate in the study.

NAME of Student ----------

NAME OF school----------

SIGNATURE OF Student ----------
DATE _____

Please complete, detach and return this form to Principal or Deputy Principal who will forward it to:

Freepost No. 3214
Dr David Yeboah
Senior Researcher
NZCER
P O Box 3237
WELLINGTON
PHONE: (04) 802 1463

APPENDIX E
Phase 2 Introductory Material
FINAL SECONDARY TRANSITION FOLLOW-UP PHONE INTERVIEW 2000

(To be read out for every interview as part of the informed consent process.
See NZCERs ethical statement July 1998 revision.)

- Hello my name is _____.
- I am calling from the Council for Educational Research in Wellington. *(If participants ask what NZCER is, give them the information at the bottom of this page.)*
- At the end of last year, in 1999, when you were at secondary school, you filled in a questionnaire about what you were going to do when you left school. This questionnaire was part of a study that looks at the decisions that students make about what they will do when they leave school.
- Do you remember that questionnaire? *(If respondents don't remember tell them a bit about the 1999 questionnaire and the study, e.g., the colour, it had questions about their study and work plans and the information they used to make decisions. It was funded by the Ministry of Education.)*
- I am ringing to ask if you would be willing to take part in a short phone interview as a follow-up to the 1999 survey.
- A $10 music, book, or movie voucher will be sent to you at the end of this interview as a thank you for your time. We will also send you a summary of the results of the 1999 study.
- This interview is about what you have done since you left school; it should take about 10 to 15 minutes. Anything you say is confidential, your comments will not be identifiable in any reports, and only the research team knows that you are in this study. You do not have to answer all the questions if you do not want to.
- We will send you a summary of this study when the interviews are finished and the findings are published in the middle of 2001.
- **Do you agree to do this interview?**
- **Is it okay to do the interview now?**
- *If not free to be interviewed say:* We can arrange a better time for you.
- *If not willing to be interviewed say:* Thank you for being involved in the first part of this study. Do you want a copy of the 1999 results? *(goto q14d – summary and address check, but no voucher)*
- Do you have any questions before I start?

NZCER INFORMATION

NZCER was set up in 1934. At NZCER we do research about education in New Zealand and publish this research. This study, that you are part of, is one of the studies in the NZCER research programme.

APPENDIX F
Phase 2 Interview Schedule

Code [ ]

1) **Have you left school? When did you leave?** *(tick one only)*

- ❑ a) No - Still at school or leaving end 2000 *(End, goto q14:* **Do you want a copy of the 1999 results?***)*
- ❑ b) Yes - Left school during 2000
- ❑ c) Yes - Left school during/at end of 1999

2a) **What was the highest qualification you got at secondary school?** *(Prompt: tick one only)*

- ❑ a) None *(tick if no quals)*
- ❑ b) Unit standards no. credits at (L1:SC)____ (L2:yr12/6th)____ (L3:yr13/7th) ____
- ❑ c) _____ *(no. of subjects)* School Certificate
- ❑ d) 6th Form Certificate (e.g., finished 6th form/year 12)
- ❑ e) Framework-based national cert. (e.g., computing/educ. achievmt/emplymt skills)
- ❑ f) Higher School Certificate (e.g., finished 7th form/year 13 in at least 3 subjects)
- ❑ g) Entrance to University (3 subjects with a C's or more than 46)
- ❑ h) B Bursary
- ❑ i) A Bursary
- ❑ j) Other (e.g., First Aid, Scholarship ____ *no. of subjects*)_____

j 1 2 3 4 5 6 7 8 9

2b) **Were you studying for this qualification in 1999?**

❑ a) Yes ❑ b) No

3) **When you filled out the questionnaire in 1999 (you were unsure of your work and study plans / your work and study plans for 2000 were to):** *(Read all highlighted 1999 plans to students.)*

3a) Work: ❑ a) Full-time ❑ b) Part-time ❑ c) Not sure

3b) Study: ❑ a) Full-time ❑ b) Part-time ❑ c) Not sure

3c) Qualification: _____
(Check 1999 qualification and write out in full)

3d) Institution: _____

3e) Location: _____

3f) The career/job you were working towards was *(note check career not holiday job):*

_____

4) **Since then, have you changed or developed your plans in any way?** *(tick one only)*

- ❑ a) No – did **everything** planned. *(goto q6a)*
- ❑ b) Yes – did **some** of the things planned. *(goto q5)*
- ❑ c) Yes – **changed all** plans. *(goto q5)*
- ❑ d) Yes – **developed** plans further or a set of plans. *(goto q5)*
- ❑ e) Still **unsure** of plans *(goto q6a)*

CODING NOTE
Cross out unanswered qsts.

'75

5) **What made you change or develop your plans?** *(write ALL comments then code all that apply)*

_____

_____

_____

- ❑ a) Changed mind due to study experiences
- ❑ b) Changed mind due to work experiences
- ❑ c) Changed mind due to qualifications/grades gained at school
- ❑ d) Developed personal interest in area
- ❑ e) Changed mind in general about career
- ❑ f) Decided needed more qualifications, education, or training
- ❑ g) Financial constraints, e.g., cost/earn money to study
- ❑ h) Got new information/advice *(describe)*_____
- ❑ i) Family reasons, e.g., illness *(describe)*_____
- ❑ j) Other *(describe)* _____

h 1 2 3 4 5 6 7 8 9

i 1 2 3 4 5 6 7 8 9

j 1 2 3 4 5 6 7 8 9

6a) **What have your activities been this year?** *(read out – tick one only)*

- ❑ a) Both studying and working. *(complete all)*
- ❑ b) Studying only. *(complete 6b-6f then goto 6j)*
- ❑ c) Working for money only. *(complete 6g on)*
- ❑ d) Working for no money, community work, or doing an internship. *(complete 6g on)*
- ❑ e) Travelling. *(goto 6j)*
- ❑ f) On a benefit/not working or studying/unemployed. *(goto 6j)*
- ❑ g) Other. *(describe)* _____ *(goto 6j)*

6b) **STUDY: Could you give me some details about the study you did this year? Did you study for a:** *(read out) (Don't ask if did as planned but since changed mind goto 6j.)*

❑ a) Degree ❑ b) Another qual., e.g., Diploma ❑ c) Training Ops/Youth training

6c) ❑ a) Full-time ❑ b) Part-time

6d) ___The name of the qualification: _____

6e) ___The name of the institution: _____

6f) The location of the institution: _____

6g) **WORK: Could you give me some details about the work you have done this year? Was it?** *(read out) (Complete 6g from info from 6ab or 6ad - don't repeat.)*

❑ a) Full-time ❑ b) Part-time or casual ❑ c) Community, unpaid wk, or an internship

6h) ___Job title1: _____

6i) ___Job title2: _____

6j) **What is the name of the job or career area you are aiming for?** *(if not sure goto q8a, if lists more than one ask for main career area)*

j ____

_____

7) **What are the MAIN reasons why you have chosen this job or career area?** *(Prompt: interest, best school subject, family business, money, just fell into it)*

_____ 1 2 3
_____ 4 5 6
_____ 7 8 9

8a) **I am going to read out a list of information sources that you might have used, in 1999, to decide what you actually did this year. Could you say "yes" or "no" as I read out this list to tell me which sources you did use.** *(read out list – tick "8a" boxes)*

8a	*8b*	
❑	❑	a) Family members and relatives
❑	❑	b) Family friends
❑	❑	c) Your friends and peers
❑	❑	d) The careers information and advice service at your school
❑	❑	e) School teachers
❑	❑	f) Transition courses or work experience organised at your school
❑	❑	g) Other work experience
❑	❑	h) STAR courses
❑	❑	i) Quest database
❑	❑	j) KiwiCareers Internet website
❑	❑	k) Other Internet websites
❑	❑	l) Careers Expo.
❑	❑	m) University or polytechnic open days
❑	❑	n) Brochures or handbooks put out by universities or polytechnics
❑	❑	o) University or polytechnic visitors or liaison officers
❑	❑	p) Other careers talks or seminars by visiting businesses, the army, etc
❑	❑	q) Careerpoint telephone careers information
❑	❑	r) Print media such as newspapers, magazines, and books
❑	❑	s) TV
❑	❑	t) Radio
❑	❑	u) Other *(describe)*_____
❑		v) No sources (e.g., working or earning money to study)

1 2 3
4 5 6
7 8 9

8b) **Looking back, which 3 sources were the MOST USEFUL in helping you to decide what you did in 2000?** *(read out respondent's "8a" list – tick "8b" boxes)*

9a) **Looking back at the study or career decisions that you made at the end of 1999, do you think that you had enough information, advice, or preparation to make good decisions about your "life after school?"**

❑ a) Yes – mostly ❑ b) Yes – partly ❑ c) No ❑ d) Not sure

9b) **Is there any extra information, advice, or preparation that would have helped you make decisions about your "life after school?" This is?**

_____ 1 2 3
_____ 4 5 6
_____ 7 8 9

10) **Looking back, if you were in 1999 again, would you have made the same study or career decisions?** *(tick one only)*

- ❑ a) Yes – all of them *(goto q12)*
- ❑ b) Yes – some of them *(goto q11a)*
- ❑ c) No *(goto q11a)*

11a) **What would you have done differently?**

_____ 1 2 3
_____ 4 5 6
_____ 7 8 9

11b) **Why would you have made different decisions?**

_____ 1 2 3
_____ 4 5 6
_____ 7 8 9

12) **What are your study or career plans for the next couple of years?** *(tick all that apply)*

- ❑ a) Continue on with current course of study/post grad
- ❑ b) Change course of study
- ❑ c) Find a course to do
- ❑ d) Work in a career-related job
- ❑ e) Work to earn money to study
- ❑ f) Go travelling overseas
- ❑ g) Unpaid work/community work/internship
- ❑ h) On benefit/not in paid employment
- ❑ i) Not sure
- ❑ j) Other *(describe)* _____

j 1 2 3
4 5 6
7 8 9

13) **This is the last question of this interview. Is there anything else you would like to say about your career choices and the information or advice that helped you make these choices?**

_____ 1 2 3
_____ 4 5 6
_____ 7 8 9

_____

For admin purposes only

We will be sending you a summary of the 1999 study results along with a $10 voucher. **Code [ ]**

14) **Would you like a:** ❑ a) Music ❑ b) Book or ❑ c) Movie voucher?

(If students did NOT complete interview) ❑ d) Summary of 1999 study ONLY

15) **Is this the address that the voucher/summary should be sent to?** *(Read out from DB – check for missing details such as suburb)*

❑ a) Yes *(End of interview)* ❑ b) No **(What is your new address?)**

New address:

_____

_____

Thank you for your time. Do you have any questions about this study?